TOSHIBA

SERVICE MANUAL

COLOUR TELEVISION

C8SS Chassis

3787DB

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CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is Ⓐ kV at zero beam current (minimum brightness) under a Ⓒ V AC power source. The high voltage must not, under any circumstances, exceed Ⓑ kV.

Refer to table-1 for high voltage Ⓐ, Ⓑ & AC voltage Ⓒ. (See SETTING & ADJUSTING DATA on page 16)

   Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
3. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

SET-UP ADJUSTMENT

■ The following adjustments should be made when a complete realignment is required or a new picture tube is installed. Perform the adjustments in order as follows :

1. Color Purity
2. Convergence
3. White Balance

Note: The PURITY/CONVERGENCE MAGNET assembly and rubber wedges need mechanical positioning. Refer to figure 1.

* There are no adjustment of purity and convergence in some picture tube (Unified with purity magnet).

COLOR PURITY ADJUSTMENT

NOTE : Before attempting any purity adjustments, the receiver should be operated for at least fifteen minutes.

1. Demagnetize the picture tube and cabinet using a degaussing coil.
2. Set the brightness and contrast to maximum.
3. Use a green raster from among the built-in test signals.
4. Loosen the clamp screw holding the yoke and slide the yoke backward or forward to provide vertical green belt (zone) in the picture screen.
5. Remove the Rubber Wedges.
6. Rotate and spread the tabs of the purity magnet (See figure 2.) around the neck of the picture tube until the green belt is in the center of the screen. At the same time, enter the raster vertically.
7. Slowly move the yoke forward or backward until a uniform green screen is obtained. Tighten the clamp screw of the yoke temporarily.
8. Check the purity of the red and blue raster.

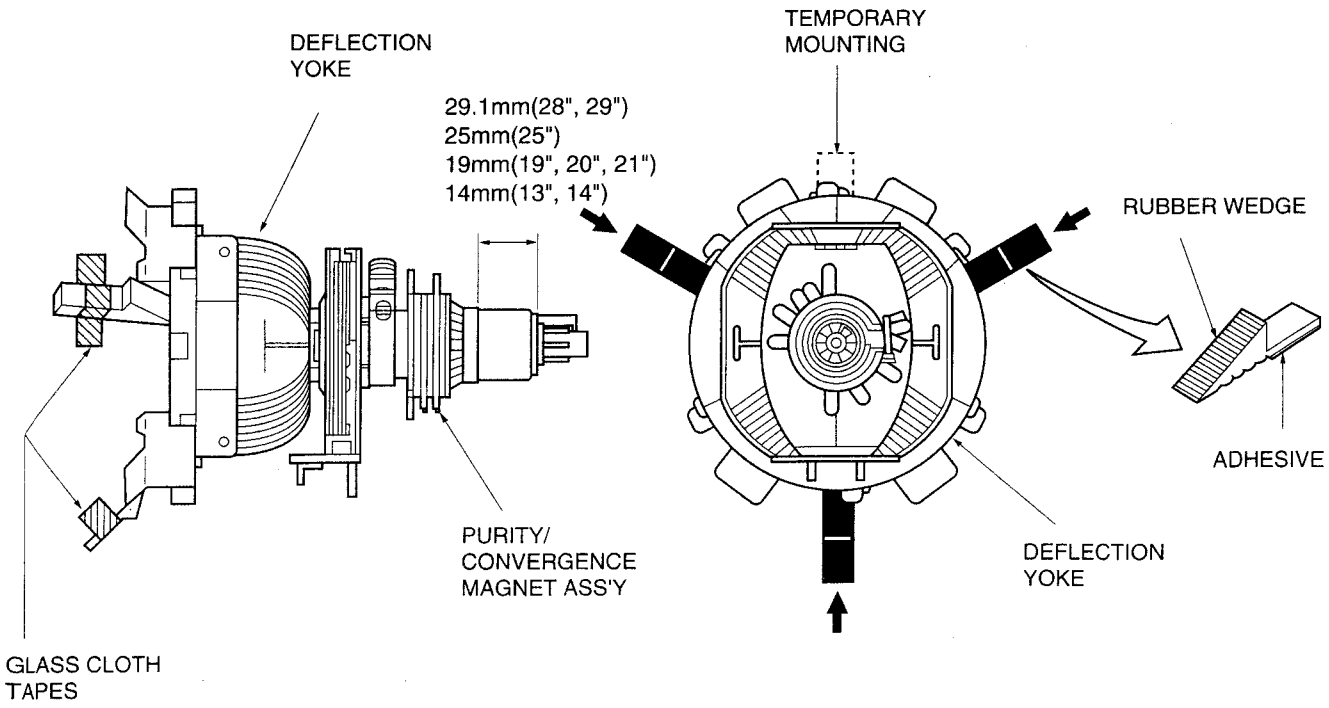


Figure 1.

CONVERGENCE ADJUSTMENTS

NOTE: Before attempting any convergence adjustments, the receiver should be operated for at least fifteen minutes.

■ CENTER CONVERGENCE ADJUSTMENT

1. Use the cross-dot pattern from among the built-in test signals.
2. Set the brightness and contrast for well defined pattern.
3. Adjust two tabs of the 4-Pole Magnets to change the angle between them (See figure 2.) and superimpose red and blue vertical lines in the center area of the picture screen.
4. Turn the both tabs at the same time keeping the angle constant to superimpose red and blue horizontal lines at the center of the screen.
5. Adjust two tabs of 6-Pole Magnets to superimpose red/blue line and green one. Adjusting the angle affects the vertical lines and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 3, 4, 5 keeping in mind red, green and blue movement, because 4-Pole Magnets and 6-Pole Magnets have mutual interaction and make dot movement complex.

■ CIRCUMFERENCE CONVERGENCE ADJUSTMENT

1. Loosen the clamping screw of deflection yoke slightly to allow the yoke to tilt.
2. Temporarily put a wedge as shown in figure 1. (Do not remove cover paper on adhesive part of the wedge.)
3. Tilt front of the deflection yoke up or down to obtain better convergence in circumference. (See figure 3.) Push the mounted wedge into the space between picture tube and the yoke to fix the yoke temporarily.
4. Put other wedge into bottom space and remove the cover paper to stick.
5. Tilt front of the yoke right or left to obtain better convergence in circumference. (See figure 3.)
6. Keep the yoke position and put another wedge in either upper space. Remove cover paper and stick the wedge on picture tube to fix the yoke.
7. Detach the temporarily mounted wedge and put it in another upper space. Stick it on picture tube to fix the yoke.
8. After fixing three wedges, recheck overall convergence. Tighten the screw firmly to fix the yoke and check the yoke is firm.
9. Stick three adhesive tapes on wedges as shown in figure 1.

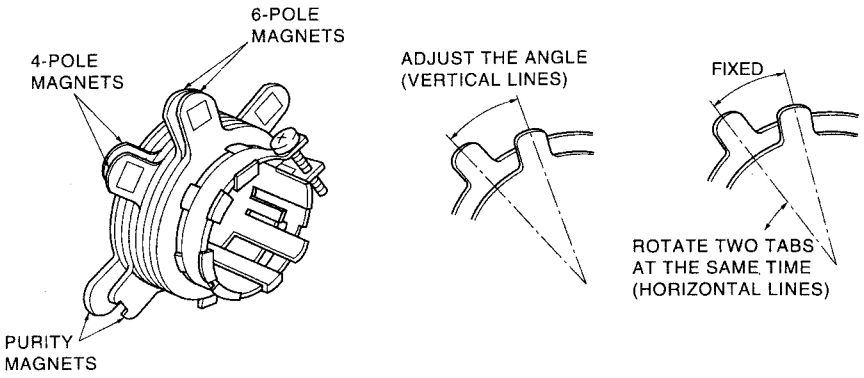
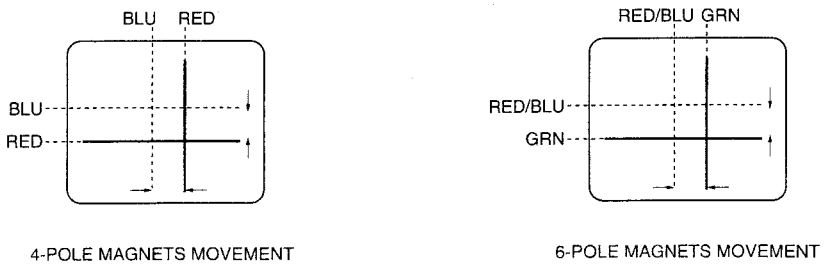


Figure 2.



Center Convergence by Convergence Magnets

Circumference Convergence by DEF Yoke

Figure 3. Dot Movement Pattern

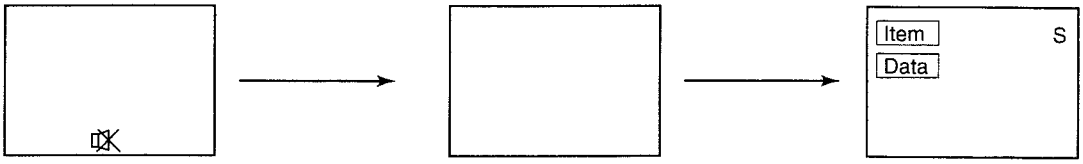
SERVICE MODE

1. ENTERING TO SERVICE MODE

1) Press 🔇 button once on Remote Control.

2) Press 🔇 button again to keep pressing.

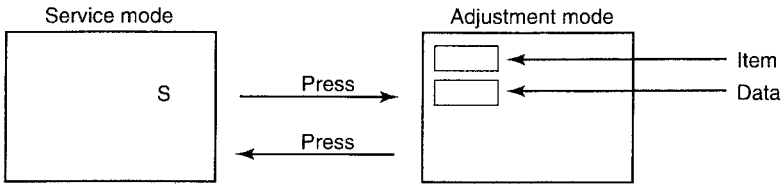
3) While pressing the 🔇 button, press MENU button on TV set.



(Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

A single horizontal line ON/OFF:	- / - - button (on Remote) or ⊖ button (on TV)
Test signal selection :	⊖ button (on Remote)
Selection of the adjustment items :	Channel ▲/▼ (on TV or Remote)
Change of the data value :	Volume ◿ +/– (on TV or Remote)
Adjustment menu mode ON/OFF :	MENU button (on TV)
Initialization of the memory (QA02) :	CALL + Channel button on TV (▲)
Reset the count of operating protect circuit to "00":	CALL + Channel button on TV (▼)
"RCUT" selection :	1 button
"GCUT" selection :	2 button
"BCUT" selection :	3 button
"CNTX" (or "SCNT") selection :	4 button
"COLC" selection :	5 button– – – – Color thickness correction
"TNTC" selection :	6 button note: Displayed differently as shown below, de-
Test audio signal ON/OFF (1kHz) :	8 button pending on the setting of the receiving color
Self diagnostic display ON/OFF :	9 button system.
	COLP (PAL)
	COLC (NTSC)
	COLS (SECAM)

CAUTION : Never try to perform initialization unless you have changed the memory IC.

4. SELECTING THE ADJUSTING ITEMS

1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 16)

5. ADJUSTING THE DATA

1) Pressing of VOLUME ◿ +/– button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

1) Pressing POWER button to turn off the TV once.

■ INITIALIZATION OF MEMORY DATA OF QA02

After replacing QA02, the following initialization is required.

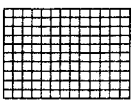
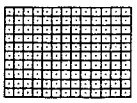
1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been complated.
3. Check the picture carefully. If necessary, adjust any adjustment item above.
   Perform "Auto search Memory" on the owner's manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

7. TEST SIGNAL SELECTION

1) Every pressing of -⊖ button on the Remote Control changes the built-in test patterns on screen as described below in SERVICE MODE.

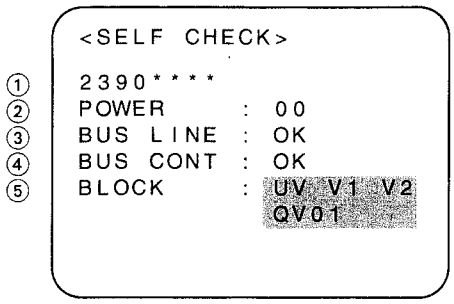
Signal off ⟶ NTSC signals (14 patterns)
↑ ⟵ PAL signals (14 patterns) ⟵ ┘

Signals	Picture
• Red raster • Green raster • Blue raster • All Black • All White	
• Black & White	
• Black cross-bar • White cross-bar • Black cross-bar on green raster	
• Black cross-hatch • White cross-hatch	
• Black cross-dot • White cross-dot	
• H signal (white) • H signal (black)	

* The signals marked with are not usable to display in the Test signal for some model.

8. SELF DIAGNOSTIC FUNCTION

1) Press "9" button on Remote Control during display of adjustment menu in the service mode.
   The diagnosis will begin to check if interface among IC's are executed properly.
2) During diagnosis, the following displays are shown.



① Part number of microcomputer (QA01)
② Operation number of protecting circuit ----"00" is normal.
When indication is other than "00", overcurrent apts to flow, and circuit parts may possibly be damaged.
③ BUS LINE CHECK ----"OK" is normal.
"SDA1-GND" ---------- SDA-GND short circuit.
"SCL1-GND" ---------- SCL-GND short circuit.
"SCL1-SDA1" ---------- SCL-SDA short circuit.
④ BUS CONT ----"OK" is normal.
When indication shows "Q○○○ NG", the device with the number may possibly be damaged.
⑤BLOCK
UV : TV reception mode
V1 : VIDEO 1 input mode (←①)
V2 : VIDEO 2 input mode (←②)

Indicated color of mode now selected : Green and Red
Indicated color of other modes : White

Green : Normal
Red : The microcomputer operates to provide judgement of no video signal. The red color is still indicated though the signal is input, failure may exist in input signal line including QV01.
QV01 : In case of indication green ---Normal
In case of indication red with input signal----
Failure may exist in output line including QV01.

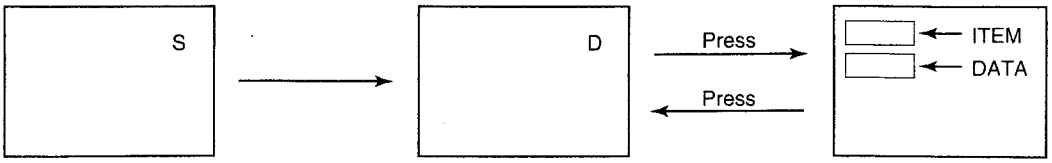
NOTE: Component which controls character display on screen is QT01, QV01 or QF01 (TELETEXT IC.). If this display function fails to operate due to damage in QT01, QV01 or QF01 self diagnosis procedure is as follows.
(1) In case that power indicator is blinking with interval of 0.5 seconds, it means protecting circuit (Current limiter) is operating, and circuit components may possibly be damaged. Check related components.
(2) In case that power indicator is blinking with interval of 1 second: Protecting circuit does not operate, but a part of Bus line does not operate normally. Check Bus line.

* The items marked with ▒ are not usable to display in the SELF DIAGNOSTIC FUCTION for some model.

DESIGN MODE

1. ENTERING TO DESIGN MODE

1) Select the Service mode. 2) While pressing CALL button on Remote and press MENU button on TV. 3) Press MENU button on TV.



(Design mode) (Adjustment mode)

When QA02 is initialized, items "OPT0" and "OPT1" of DESIGN MODE are set to the data of the representative model of this chassis family.
Therefore, because ON-SCREEN specification remains in the state of the representative of model. This model is required to reset the data of items "OPT0" and "OPT1".

2. SELECTING THE ADJUSTING ITEMS

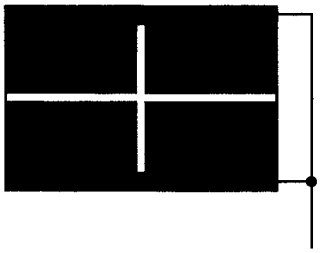
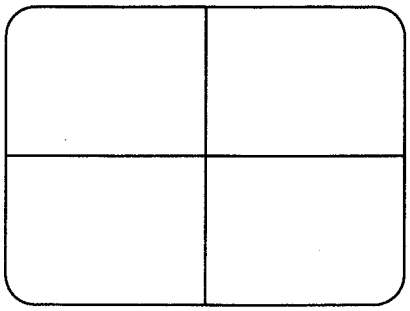
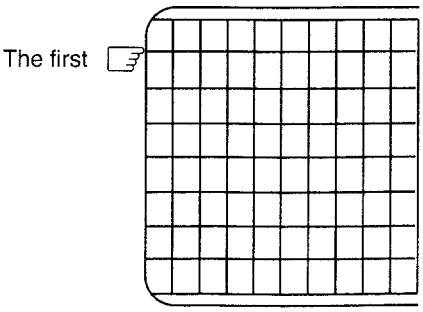
Every pressing of CHANNEL ▼ button in the design mode changes the adjustment items in the order of table-3.

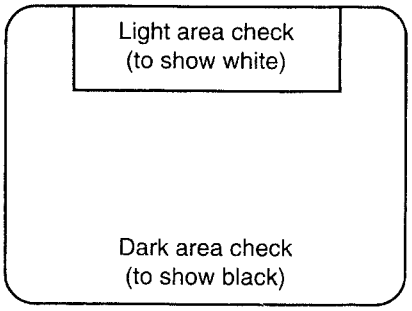
Refer to table-3 for data of design mode.
(See SETTING & ADJUSTING DATA on page 16)

3. ADJUSTING THE DATA

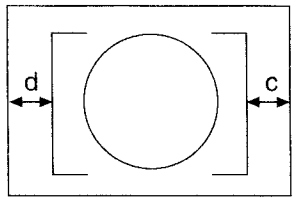
Pressing of VOLUME ▲ or ▼ button will change the value of data.

ELECTRICAL ADJUSTMENTS

ITEM	ADJUSTMENT PROCEDURE
FOCUS VR ADJ	1. Enter the service mode, then select any register item. 2. Press the TV/VIDEO button on the Remote until the black cross-bar pattern appears on the screen. 3. Adjust the FOCUS control (on T461) for well defined scanning lines on the picture screen.
SUB-BRIGHTNESS (BRTC) Note: Constrict the picture height until the vertical retrace line appears adjusting the item HIT (HEIGHT).	1. Set CONTRAST to minimum, and BRIGHTNESS to center by adjusting user controls. 2. Set the TV in service mode to get white cross-bar of inside pattern. 3. Select BRTC (brightness correction), and adjust the ◿ – /+ button to reduce the value so that white portion of inside pattern slightly light. 4. Adjust ◿ – /+ button to increase the data value of BRTC, and set it just before the difference between the belt of vertical retrace and the border of black portion of inside pattern is visible. After that, return vertical height and contrast.  Belt of vertical retrace
HORIZONTAL POSITION ADJUSTMENT (HPOS) VERTICAL POSITION ADJUSTMENT (VPOS)	1. Set the TV in service mode, and get black or white cross-bar signal with VIDEO button on remote hand unit. 2. Select either HPOS (Horizontal picture phase) or VPOS (Vertical picture phase) with CHANNEL ▲, ▼ buttons, and adjust horizontal or vertical picture position in the center of screen with VOLUME ◿ – /+ buttons. 
VERTICAL AMPLITUDE ADJUSTMENT (HIT)	1. Set the TV in service mode, and get black or white cross-hatch signal with VIDEO button on remote hand unit. 2. Select HIT (Vertical amplitude) with CHANNEL ▲, ▼ buttons, and adjust vertical amplitude with VOLUME ◿ – /+ buttons so that vertical amplitude lacks a little. 3. Adjust vertical amplitude with VOLUME ◿ – /+ buttons so that the first bar on cross-hatch signal touches edge of screen. The first 

ITEM	ADJUSTMENT PROCEDURE
WHITE BALANCE ADJUSTMENT ● CUTOFF ADJUSTMENT (RCUT) (GCUT) (BCUT) ● DRIVE ADJUSTMENT (GDRV) (BDRV)	1. Set Contrast to 40, and brightness to +20 by picture control. 2. Set the TV in service mode, and get the inside W/B adjusting signal with VIDEO button. 3. Select RCUT, GCUT and BCUT with CHANNEL ▲, ▼ buttons, to set individual values to Initial reference data, and to set GDRV and BDRV to Initial reference data with VOLUME ◿ – /+ buttons. 4. Press -/- - button on the remote control and rotate Screen VR to get one slight horizontal line on screen. Note: Every pressing of -/- - button provides Horizontal line picture and Normal picture alternately. 5. Press -/- - button to release horizontal line picture, and select the two other colors which did not light in the above step with CHANNEL ▲, ▼ buttons. Then tap VOLUME ◿ – /+ buttons so that three colors slightly light in the same level. ※ To correct white balance in light area, select GDRV and BDRV with CHANNEL ▲, ▼ buttons to adjust. ※ To correct white balance in dark area, perform fine adjustment of RCUT, GCUT and BCUT. 

Model C8SS Series (Reference factory adjustment)

Item	Name		Adjustment signal	Adjustment condition and procedure
HIT VPOS	: HEIGHT : VERT. POSITION	Visual adjustment with a picture (Bus control)	WG Philips pattern Do not use the Philips pattern for France SECAM.	1. Condition : Cont. - max., Bright - cent., Color - cent. 2. Adjustment procedure a. Adjust V.Position by the sub-address VPOS so that the vertical center of the circle of the Philips pattern comes to the center of the screen. b. Adjust the screen by the sub-address HIT so that the top and bottom flags of the Philips pattern just go off the screen.
HPOS	: HORIZONTAL POSITION	Visual adjustment with a picture (Bus control) 	WG Philips pattern Do not use the Philips pattern for France SECAM.	1. Condition : Cont. - max., Bright - cent., Color - cent. 2. Adjustment procedure Adjust the screen by the sub-address HPOS so that d-c of the Philips pattern becomes minimum.
WID PARA TRAP	: Horizontal amplitude adjustment : Pincushion distortion adjustment : Keystone distortion adjustment	Visual adjustment with a picture (Bus control)	WG Philips pattern Do not use the Philips pattern for France SECAM.	1. Condition : After adjusting V.HEIGHT, VERT.POSITION and H.POSITION, set Cont. - max., Bright - cent., Color - cent. 2. Adjustment procedure a. Adjust the horizontal amplitude by the sub-address WID. Adjust the screen so that the left and right white flags of the Philips pattern just go off the screen. b. With the sub-address PARA, make the left and right vertical bars straight. c. With the sub-address TRAP, correct the keystone distortion. d. Again, adjust the sub-address WID.

Item	Name	Setting	Input signal	Measurement point	Adjustment method	Adjustment standard
BRTC	Sub-bright adjustment	Contrast : Max. Bright : Center Color : Min.	Sub-bright signal	Screen adjustment	① This item shall be adjusted after the screen VR adjustment and white balance adjustment. ② Adjust the number of collapsed black lines of the sub-bright signal.	4 ± 1.5 lines
SCNT	Sub-contract adjustment	Contrast : Max. Bright : Center Color : Min.	Sub-bright signal (PAL-I)	IC501 #12 B-OUT	① Select SCNT. ② By selecting SCNT, B/W mode is activated. ③ Adjust the white level amplitude from the pedestal level of Y-signal. *Using the screen VR, adjust the amplitude at the point which is not fluctuated.	For UK model : 2.5 ± 0.2V(o-p) For other models : 2.3 ± 0.2V(o-p)
COLP	Sub-color adjustment (PAL)	Contrast : Max. Bright : Center Color : Center	Sub-bright signal	IC501 #12 B-OUT	① Select COLP. ② By selecting COLP, the Y-signal is muted and only color signals are outputted. ③ Adjust the upper half of the amplitude of the rainbow color bar signal output.	1.25 ± 0.15V(o-p)
RCUT GCUT BCUT Screen VR	Screen adjustment and white balance adjustment (R cutoff) (G cutoff) (B cutoff) (Screen)	RCUT GCUT BCUT } 40H GDRV BDRV } 80H Activate horizontal straight line mode. (Local video key)		Screen adjustment	① Set the conditions as shown left. ② Gradually raise the screen brightness until either of R, G or B line starts to gleam slightly. ③ Determine that point as the screen VR adjustment position. ④ Using RCUT, GCUT and BCUT, raise the brightness of two lines except the one that gleamed in the step ② until these lines start to gleam slightly. (i.e. make the screen almost white.) ⑤ Release the horizontal straight line mode. (Local video key) ⑥ Using the white balance checker, repeat the adjustment steps until both bright and dark parts becomes correct value.	HIGH LIGHT (103cd/m²) 8750K –0.002uv DARK (17cd/m²) 8750K –0.002uv * Adjustment range is the same as before.

(Only for the sets with SECAM function)

Item	Name	Setting	Input signal	Measurement point	Adjustment method	Adjustment standard
SRY SBY	SECAM black level adjustment R-Y axis B-Y axis	Cont. : MAX., Bright : CEN., Color : CEN.	SECAM color bar signal	IC501 #35 (R-Y axis) #36 (B-Y axis)	① Adjust the level of B/W part of the color difference signal to the level of H, BLK part. ② Adjust the R-Y axis and B-Y axis by SRY and SBY respectively.	Below ±10mV on both axes.
BELL	SECAM bell filter adjustment	Cont. : MAX., Bright : CEN., Color : CEN.	SECAM color bar signal	IC501 #36 (B-Y axis)	① Connect #26 of IC501 and 5V with 1kΩ. ② Set "04H" to the data of COLC. ③ Deform BELL and adjust the output waveform flat. ④ Disconnect the resistor of ① and restore COLC.	Waveform flat
COLS	SECAM color level adjustment	Cont. : MAX., Bright : CEN., Color : CEN.	SECAM color bar signal	IC501 #12 B-OUT	Adjust the R-Y amplitude. (Positive side). * This adjustment must be done after the COLP adjustment.	1.75 ± 0.2V(o-p)

CIRCUIT CHECK

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST controls to minimum (zero beam current).
3. High voltage must be measured below Ⓑ kV.

Refer to table-1 for high voltage Ⓑ.
(See SETTING & ADJUSTING DATA on page 16)

4. Vary the BRIGHTNESS control to both extremes to be sure the high voltage does not exceed the limit under any conditions.

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA

【 SAFETY INSTRUCTIONS 】

		37"
HIGH VOLTAGE AT ZERO BEAM:	Ⓐ	32.5 kV
MAX HIGH VOLTAGE:	Ⓑ	33.6 kV
AC VOLTAGE	Ⓒ	220~240 V

Table-1

【 SERVICE MODE 】

ADJUSTING ITEMS AND DATAS IN THE SERVICE MODE:

Item	Adjustment	Preset	Data
RCUT	R CUTOFF (B/W)	40H	←
GCUT	G CUTOFF (B/W)	40H	←
BCUT	B CUTOFF (B/W)	40H	←
GDRV	G DRIVE	80H	←
BDRV	B DRIVE	80H	←
CNTX	SUB CONTRAST MAX	FFH	←
BRTC	SUB BRIGHT CEN	80H	←
COLC	SUB COLOR CEN NTSC	0EH	←
TNTC	SUB TINT CEN	40H	←
COLP	SUB COLOR CEN PAL	6EH	←
COLS	SUB COLOR CEN SECAM	F5H	←
SCNT	SUB CONTRAST	07H	←
HPOS	50Hz H-POSITION	0CH	←
VPOS	V-POSITION	04H	←
HIT	HEIGHT	45H	←
VLIN	V-LINEARITY	10H	←
VSC	V-S CORRECTION	0BH	←
VPS	V-SHIFT	0FH	←
VCP	V-COMPENSATION	06H	←
WID	PICTURE WIDTH	2BH	←

Item	Adjustment	Preset	Data
PARA	E-W PARABOLA	2CH	←
CNR	E-W CORNER	05H	←
TRAP	TRAPEZIUM	15H	←
HCP	H-COMPENSATION	00H	←
VFC	V-F CORRECTION	0FH	←
BELL	SECAM BELL FILTER	01H	←
SRY	SECAM R-Y	08H	←
SBY	SECAM B-Y	08H	←

Table-2

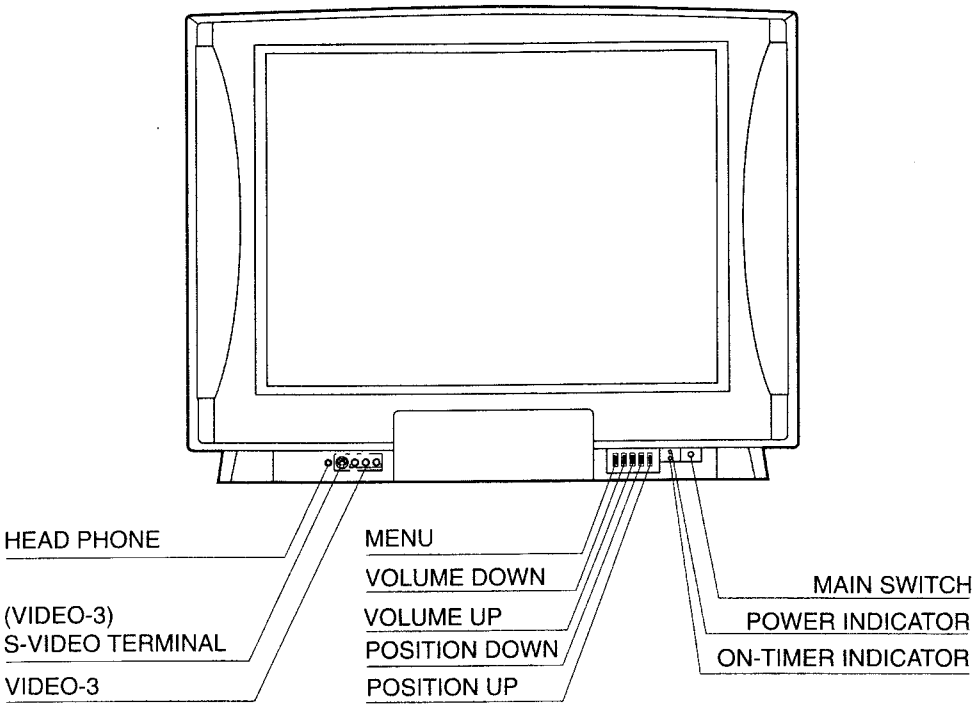
【 DESIGN MODE 】

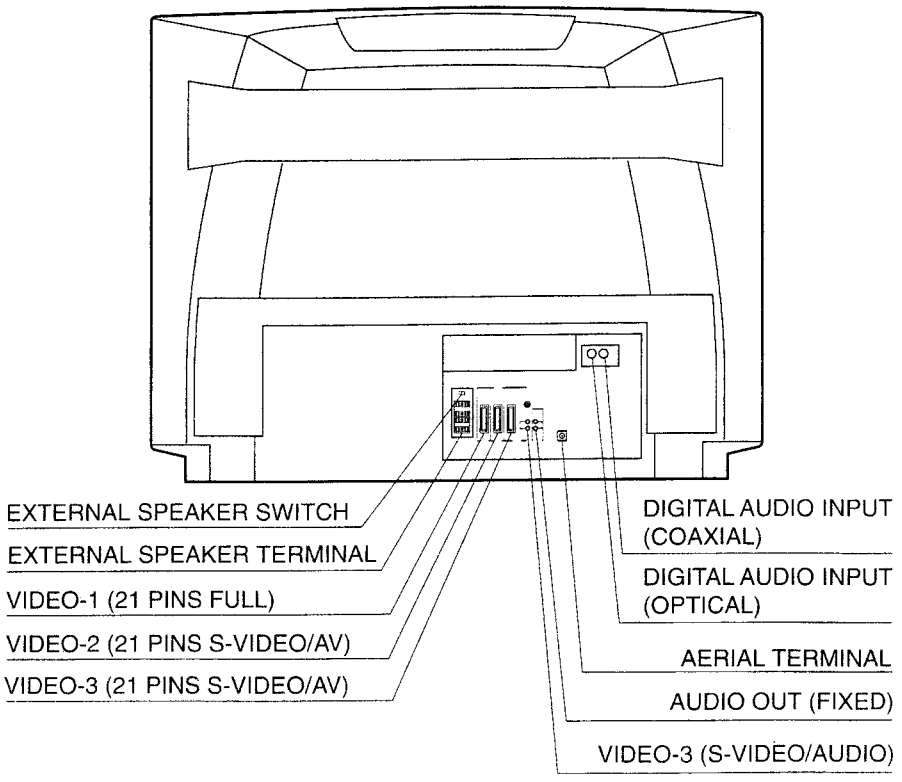
ADJUSTING ITEMS AND DATAS IN THE DESIGN MODE:

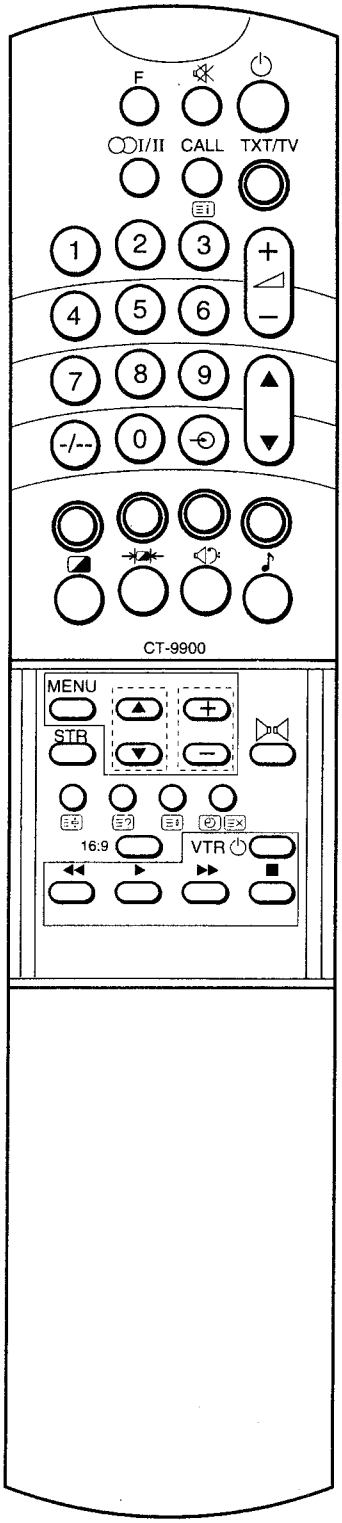
Item	Name of adjustment	Preset Data	Data	Remarks
	* There are no adjustment mode in the DESIGN MODE.			

Table-3

LOCATION OF CONTROLS







KEY ASSIGNMENT

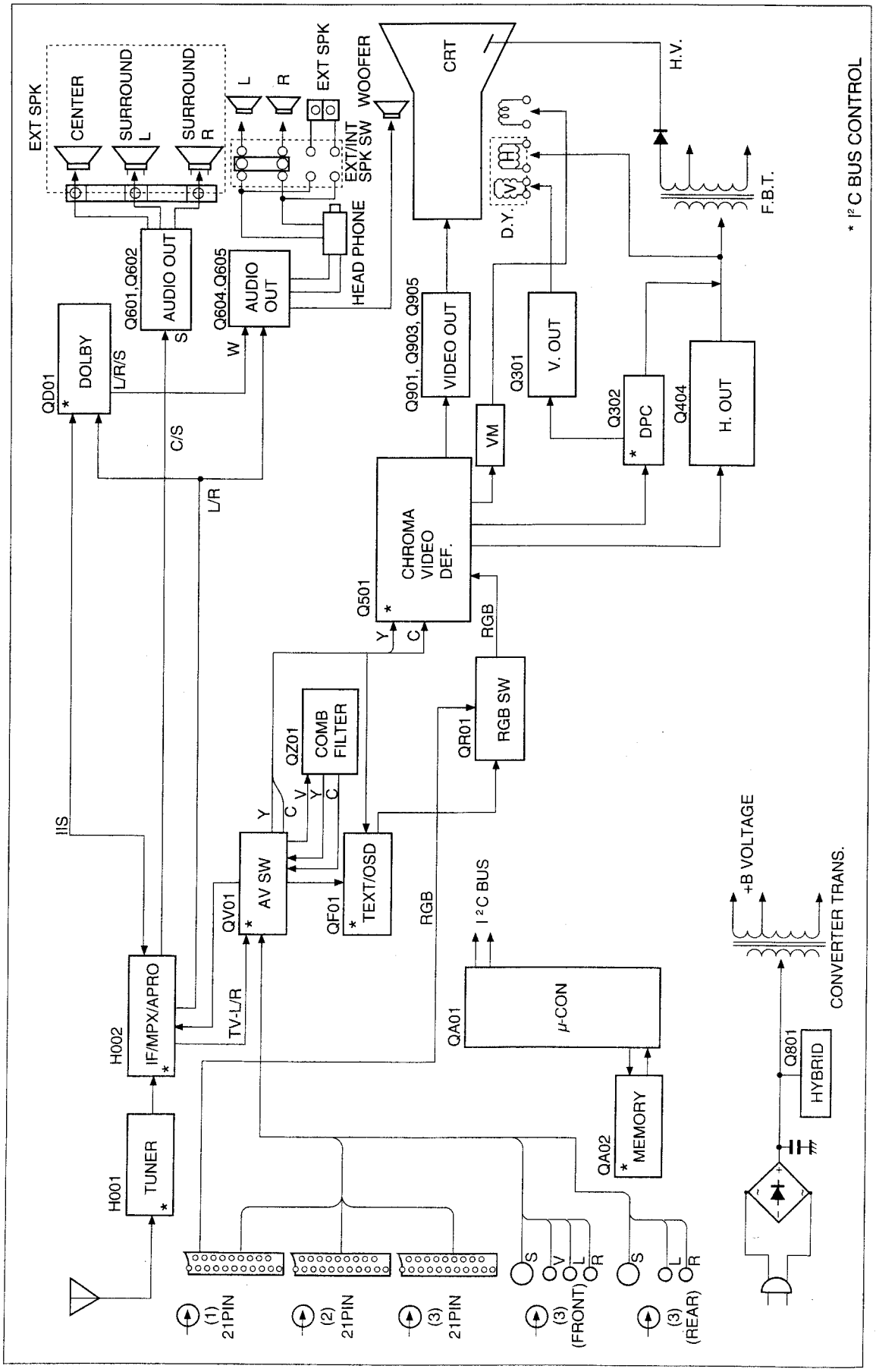
⏻ ..... ON/STAND-BY
🔇 ..... Sound mute
F ..... (Quick/advanced operation)
CALL (On-screen call)/📖 (index, initial) ..... TELETEXT MODE
◪ ..... PICTURE MENU
♪ ..... SOUND MENU
I/II ..... <TV MODE> ..... STEREO BILINGUAL
1~9, 0 ..... TEN KEY
- / - - ..... 1 or 2 place
⇥ ..... VIDEO INPUT (EXTERNAL INPUT SOURCE SW.)
◿ ..... VOLUME
+ ..... LEVEL PLUS (VOLUME, MENU)
– ..... LEVEL MINUS (VOLUME, MENU)
▲ ..... UP (POSI., CH., TEXT PAGE)
▼ ..... DOWN (POSI., CH., TEXT PAGE)

TELE-TEXT
- TXT/TV ... TEXT, MIX, TV MODE SW.
- 📖 ..... HOLD
- 📖 ..... <TEXT MODE> ..... REVEAL / CONCEAL
- 📖 ..... <TEXT MODE> ..... F-T-B (FULL, TOP, BOTTOM)
- 🕒/✉ ..... TIME DISPLAY (TV MODE) TEXT CLEAR (TEXT MODE)
- FLOF COLOUR KEY (4 key used) Red/Green/Yellow/Blue

Super woofer
DSP/SURROUND
Selectable picture ..... Selectable picture
MENU ..... TUNING & OTHER MENU
Menu select
Level down/up
16:9 ..... PIC SIZE (Picture size select)
STR ..... Store
▲/▼ ..... Menu Select
+/– ..... Level up/down

VTR control
⏻ Power on/standby
▶ Play
■ Stop
◀◀ Rewind
▶▶ Fast forward

CIRCUIT BLOCK DIAGRAM



CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:
- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with * mark is no longer available after the end of the production.*

Model : 3787DB

Capacitors	CD	: Ceramic Disk	PF	: Plastic Film	EL	: Electrolytic
Resistors	CF	: Carbon Film	CC	: Carbon Composition	MF	: Metal Film
	OMF	: Oxide Metal Film	VR	: Variable Resistor	FR	: Fusible Resistor

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Part No.	Description
CAPACITORS		
C101	24763221	EL, 220μF, ±20%, 16V
C102	24763221	EL, 220μF, ±20%, 16V
C103	24232103	CD, 0.01μF, +80%, −20%
C104	24794470	EL, 47μF, ±20%, 16V
C105	24212102	CD, 1000pF, ±10%
C106	24797100	EL, 10μF, ±20%, 50V
C107	24763221	EL, 220μF, ±20%, 16V
C108	24763101	EL, 100μF, ±20%, 16V
C111	24797229	EL, 2.2μF, ±20%, 50V
C115	24232103	CD, 0.01μF, +80%, −20%
C204	24591334	PF, 0.33μF
C211	24203220	EL, 22μF, ±20%, 16V
C214	24814103	Chip, 0.01μF, +80%, −20%
C215	24203470	EL, 47μF, ±20%, 16V
C216	24206010	EL, 1μF, 50V
C217	24206479	EL, 4.7μF, 50V
C218	24590104	PF, 0.1μF
C219	24763471	EL, 470μF, ±20%, 16V
C220	24092178	Chip, 0.1μF, ±10%, B
C221	24092178	Chip, 0.1μF, ±10%, B
C222	24092178	Chip, 0.1μF, ±10%, B
C230	24781181	Chip, 180pF, SL
C231	24814103	Chip, 0.01μF, +80%, −20%
C232	24092178	Chip, 0.1μF, ±10%, B
C233	24781151	Chip, 150pF, SL
C234	24203470	EL, 47μF, ±20%, 16V
C235	24203470	EL, 47μF, ±20%, 16V
C236	24203220	EL, 22μF, ±20%, 16V
C237	24781270	Chip, 27pF, SL
C238	24814103	Chip, 0.01μF, +80%, −20%
C239	24781181	Chip, 180pF, SL
C273	24206229	EL, 2.2μF, 50V
C302	24617915	EL, 1μF, ±10%, 50V
C303	24214102	CD, 1000pF, ±10%, 500V
C304	24082049	PF, 0.047μF, 100V
C306	24073060	EL, 4700μF, ±20%, 25V
C308	24668221	EL, 220μF, ±20%, 35V
C309	24668101	EL, 100μF, ±20%, 35V
C310	24797222	EL, 2200μF, ±20%, 50V
C313	24082057	PF, 0.22μF, 100V
C314	24591563	PF, 0.056μF

Location No.	Part No.	Description
C315	24206010	EL, 1μF, 50V
C317	24214821	CD, 820pF, ±10%, 500V
C318	24666101	EL, 100μF, ±20%, 16V
C319	24212102	CD, 1000pF, ±10%
C320	24590102	PF, 1000pF
C321	24591203	PF, 0.02μF
C323	24538224	PF, 0.22μF
C324	24590683	PF, 0.068μF
C325	24617912	EL, 2.2μF, ±10%, 50V
C327	24617787	EL, 470μF, ±20%, 16V
C328	24232103	CD, 0.01μF, +80%, −20%
C341	24797478	EL, 0.47μF, ±20%, 50V
C370	24794101	EL, 100μF, ±20%, 16V
C371	24794100	EL, 10μF, ±20%, 16V
C400	24082361	PF, 1000pF, ±10%, 15kV
C402	24814103	Chip, 0.01μF, +80%, −20%
C403	24591223	PF, 0.022μF
C404	24206229	EL, 2.2μF, 50V
C406	24092178	Chip, 0.1μF, ±10%, B
C407	24814103	Chip, 0.01μF, +80%, −20%
C409	24781102	Chip, 1000pF, SL
C413	24214821	CD, 820pF, ±10%, 500V
C416	24678010	EL, 1μF, ±20%, 200V
C417	24214391	CD, 390pF, ±10%, 500V
C420	24794101	EL, 100μF, ±20%, 16V
C423	24829433	PF, 0.43μF, 400V
C430	24073042	EL, 1000μF, ±20%, 16V
C431	24232103	CD, 0.01μF, +80%, −20%
C431	24814103	Chip, 0.01μF, +80%, −20%
C432	24814103	Chip, 0.01μF, +80%, −20%
C433	24203470	EL, 47μF, ±20%, 16V
C434	24781102	Chip, 1000pF, SL
C440	24082489	PF, 8200pF, ±3%, 1500V
C442	24082631	PF, 0.39μF, 400V
C444	24082518	PF, 5600pF, ±3%, 1800V
C445	24828473	PF, 0.047μF, 200V
C446	24679330	EL, 33μF, ±20%, 250V
C448	24640908	EL, 33μF, ±20%, 160V
C451	24829393	PF, 0.039μF, 400V
C460	24796331	EL, 330μF, ±20%, 35V
C462	24666222	EL, 2200μF, ±20%, 16V
C463	24212222	CD, 2200pF, ±10%

Location No.	Part No.	Description
C464	24640872	EL, 10μF, ±20%, 100V
C466	24095883	PF, 0.015μF, ±3%, 630V
C470	24794220	EL, 22μF, ±20%, 16V
C472	24590474	PF, 0.47μF
C473	24669010	EL, 1μF, ±20%, 50V
C477	24590104	PF, 0.1μF
C478	24538224	PF, 0.22μF
C479	24214471	CD, 470pF, ±10%, 500V
C491A	24082359	PF, 1000pF, ±10%, 15kV
C493	24214121	CD, 120pF, ±10%, 500V
C494	24082669	PF, 0.33μF, 250V
C501	24206479	EL, 4.7μF, 50V
C502	24591103	PF, 0.01μF
C503	24206229	EL, 2.2μF, 50V
C504	24092178	Chip, 0.1μF, ±10%, B
C505	24092178	Chip, 0.1μF, ±10%, B
C506	24781102	Chip, 1000pF, SL
C508	24774130	Chip, 13pF
C509	24203100	EL, 10μF, ±20%, 16V
C510	24814103	Chip, 0.01μF, +80%, −20%
C511	24203101	EL, 100μF, ±20%, 16V
C512	24814103	Chip, 0.01μF, +80%, −20%
C513	24814103	Chip, 0.01μF, +80%, −20%
C514	24092178	Chip, 0.1μF, ±10%, B
C515	24814103	Chip, 0.01μF, +80%, −20%
C521	24206010	EL, 1μF, 50V
C528	24814103	Chip, 0.01μF, +80%, −20%
C529	24203470	EL, 47μF, ±20%, 16V
C601	24591102	PF, 1000pF
C602	24591102	PF, 1000pF
C603	24797229	EL, 2.2μF, ±20%, 50V
C604	24797229	EL, 2.2μF, ±20%, 50V
C605	24795101	EL, 100μF, ±20%, 25V
C606	24795101	EL, 100μF, ±20%, 25V
C607	24590104	PF, 0.1μF
C608	24590104	PF, 0.1μF
C609	24797471	EL, 470μF, ±20%, 50V
C610	24797471	EL, 470μF, ±20%, 50V
C611	24795221	EL, 220μF, ±20%, 25V
C613	24794471	EL, 470μF, ±20%, 16V
C614	24797229	EL, 2.2μF, ±20%, 50V
C620	24591102	PF, 1000pF
C621	24591102	PF, 1000pF
C623	24797229	EL, 2.2μF, ±20%, 50V
C624	24797229	EL, 2.2μF, ±20%, 50V
C625	24795101	EL, 100μF, ±20%, 25V
C626	24795101	EL, 100μF, ±20%, 25V
C627	24797229	EL, 2.2μF, ±20%, 50V
C628	24590104	PF, 0.1μF
C629	24590104	PF, 0.1μF
C630	24797471	EL, 470μF, ±20%, 50V
C631	24797471	EL, 470μF, ±20%, 50V
C632	24795221	EL, 220μF, ±20%, 25V
C634	24797229	EL, 2.2μF, ±20%, 50V
C635	24797229	EL, 2.2μF, ±20%, 50V
C636	24797471	EL, 470μF, ±20%, 50V
C637	24797010	EL, 1μF, ±20%, 50V
C638	24591103	PF, 0.01μF
C639	24797229	EL, 2.2μF, ±20%, 50V
C640	24797010	EL, 1μF, ±20%, 50V
C641	24591123	PF, 0.012μF
C642	24590152	PF, 1500pF
C643	24795470	EL, 47μF, ±20%, 25V
C644	24797010	EL, 1μF, ±20%, 50V

Location No.	Part No.	Description
C645	24797479	EL, 4.7μF, ±20%, 50V
C646	24590224	PF, 0.22μF
C647	24232103	CD, 0.01μF, +80%, −20%
C648	24797471	EL, 470μF, ±20%, 50V
C649	24796471	EL, 470μF, ±20%, 35V
C650	24794100	EL, 10μF, ±20%, 16V
C651	24590104	PF, 0.1μF
C652	24797229	EL, 2.2μF, ±20%, 50V
C653	24796470	EL, 47μF, ±20%, 35V
C654	24797010	EL, 1μF, ±20%, 50V
C655	24797479	EL, 4.7μF, ±20%, 50V
C656	24590224	PF, 0.22μF
C657	24232103	CD, 0.01μF, +80%, −20%
C658	24798471	EL, 470μF, ±20%, 100V
C659	24797102	EL, 1000μF, ±20%, 50V
C660	24797101	EL, 100μF, ±20%, 50V
C667	24212102	CD, 1000pF, ±10%
C668	24212102	CD, 1000pF, ±10%
C669	24797330	EL, 33μF, ±20%, 50V
C670	24797330	EL, 33μF, ±20%, 50V
C671	24781102	Chip, 1000pF, SL
C672	24781102	Chip, 1000pF, SL
C673	24781102	Chip, 1000pF, SL
C674	24781102	Chip, 1000pF, SL
C675	24781102	Chip, 1000pF, SL
C676	24781102	Chip, 1000pF, SL
C677	24781102	Chip, 1000pF, SL
C678	24781102	Chip, 1000pF, SL
C679	24781102	Chip, 1000pF, SL
C680	24797471	EL, 470μF, ±20%, 50V
C681	24781102	Chip, 1000pF, SL
C681	24797010	EL, 1μF, ±20%, 50V
C682	24781102	Chip, 1000pF, SL
C682	24590103	PF, 0.01μF
C683	24814103	Chip, 0.01μF, +80%, −20%
C683	24590103	PF, 0.01μF
C684	24794220	EL, 22μF, ±20%, 16V
C684	24814103	Chip, 0.01μF, +80%, −20%
C685	24814103	Chip, 0.01μF, +80%, −20%
C689	24814103	Chip, 0.01μF, +80%, −20%
C704	24591822	PF, 8200pF
C705	24232103	CD, 0.01μF, +80%, −20%
C707	24794470	EL, 47μF, ±20%, 16V
C712	24666470	EL, 47μF, ±20%, 16V
C713	24790100	EL, 10μF, ±20%, 160V
C714	24436101	CD, 100pF
C715	24214472	CD, 4700pF, ±10%, 500V
C716	24436101	CD, 100pF
C717	24214472	CD, 4700pF, ±10%, 500V
C718	24794470	EL, 47μF, ±20%, 16V
C719	24214151	CD, 150pF, ±10%, 500V
C720	24790100	EL, 10μF, ±20%, 160V
C721	24794470	EL, 47μF, ±20%, 16V
C722	24436561	CD, 560pF
C726	24212102	CD, 1000pF, ±10%
⚠C801	24082927	PF, 0.22μF, ±20%, AC275V
⚠C802	24082927	PF, 0.22μF, ±20%, AC275V
C805	24092281	CD, 4700pF, ±20%, AC250V
C806	24092281	CD, 4700pF, ±20%, AC250V
C808	24667331	EL, 330μF, ±20%, 25V
C809	24214471	CD, 470pF, ±10%, 500V
C810	24794102	EL, 1000μF, ±20%, 16V
C810	24086873	EL, 330μF, ±20%, 400V
⚠C811	24092557	CD, 2200pF, ±20%, AC250V

Location No.	Part No.	Description
⚠C813	24092555	CD, 1000pF, ±20%, AC250V
⚠C814	24092555	CD, 1000pF, ±20%, AC250V
⚠C815	24092553	CD, 470pF, ±20%, AC250V
C816	24669221	EL, 220μF, ±20%, 50V
C817	24092341	CD, 470pF, ±10%, 2kV
C818	24095931	PF, 2200pF, 1250V
C819	24676220	EL, 22μF, ±20%, 100V
C820	24092343	CD, 680pF, ±10%, 2kV
C821	24214471	CD, 470pF, ±10%, 500V
C822	24538474	PF, 0.47μF
C829	24590182	PF, 1800pF
C832	24797470	EL, 47μF, ±20%, 50V
C833	24669100	EL, 10μF, ±20%, 50V
C834	24797470	EL, 47μF, ±20%, 50V
C837	24795470	EL, 47μF, ±20%, 25V
C841	24669100	EL, 10μF, ±20%, 50V
C842	24669100	EL, 10μF, ±20%, 50V
C843	24590104	PF, 0.1μF
C846	24590104	PF, 0.1μF
C851	24214471	CD, 470pF, ±10%, 500V
C852	24214471	CD, 470pF, ±10%, 500V
C853	24214471	CD, 470pF, ±10%, 500V
C854	24214471	CD, 470pF, ±10%, 500V
C855	24676471	EL, 470μF, ±20%, 100V
C856	24669222	EL, 2200μF, ±20%, 50V
C857	24669222	EL, 2200μF, ±20%, 50V
C859	24667102	EL, 1000μF, ±20%, 25V
C861	24590104	PF, 0.1μF
C862	24669010	EL, 1μF, ±20%, 50V
C863	24590122	PF, 1200pF
C867	24669222	EL, 2200μF, ±20%, 50V
C868	24092281	CD, 4700pF, ±20%, AC250V
C869	24086871	EL, 120μF, ±20%, 400V
C870	24092281	CD, 4700pF, ±20%, AC250V
C871	24214471	CD, 470pF, ±10%, 500V
C872	24797221	EL, 220μF, ±20%, 50V
C873	24590272	PF, 2700pF
C876	24214331	CD, 330pF, ±10%, 500V
C877	24214471	CD, 470pF, ±10%, 500V
C878	24092339	CD, 330pF, ±10%, 2kV
C881	24667101	EL, 100μF, ±20%, 25V
C882	24082559	PF, 1500pF, ±3%, 1500V
C883	24092341	CD, 470pF, ±10%, 2kV
C884	24086916	EL, 330μF, ±20%, 160V
⚠C885	24092563	CD, 220pF, ±10%, AC250V
⚠C886	24092563	CD, 220pF, ±10%, AC250V
C887	24214471	CD, 470pF, ±10%, 500V
C888	24095634	PF, 0.01μF, ±3%, 630V
C889	24590102	PF, 1000pF
⚠C891	24082373	PF, 0.1μF, ±20%, AC250V
C892	24667222	EL, 2200μF, ±20%, 25V
C893	24092337	CD, 220pF, ±10%, 2kV
C895	24669470	EL, 47μF, ±20%, 50V
C896	24214471	CD, 470pF, ±10%, 500V
C897	24666222	EL, 2200μF, ±20%, 16V
C899	24214471	CD, 470pF, ±10%, 500V
C902	24092345	CD, 1000pF, ±10%, 2kV
C904	24436561	CD, 560pF
C905	24436561	CD, 560pF
C907	24436561	CD, 560pF
C909	24679220	EL, 22μF, ±20%, 250V
C910	24797478	EL, 0.47μF, ±20%, 50V
C911	24203100	EL, 10μF, ±20%, 16V
C912	24666331	EL, 330μF, ±20%, 16V

Location No.	Part No.	Description
C913	24763102	EL, 1000μF, ±20%, 16V
C914	24212103	CD, 0.01μF, ±10%
C920	24591104	PF, 0.1μF
C921	24591104	PF, 0.1μF
C930	24214101	CD, 100pF, ±10%, 500V
C931	24214101	CD, 100pF, ±10%, 500V
CA13	24474101	CD, 100pF, ±10%
CA14	24232103	CD, 0.01μF, +80%, -20%
CA28	24212101	CD, 100pF, ±10%
CA29	24212221	CD, 220pF, ±10%
CA30	24474101	CD, 100pF, ±10%
CA33	24232103	CD, 0.01μF, +80%, -20%
CA42	24794100	EL, 10μF, ±20%, 16V
CA43	24232103	CD, 0.01μF, +80%, -20%
CA44	24232103	CD, 0.01μF, +80%, -20%
CA68	24794100	EL, 10μF, ±20%, 16V
CA69	24232103	CD, 0.01μF, +80%, -20%
CB01	24794470	EL, 47μF, ±20%, 16V
CB90	24232103	CD, 0.01μF, +80%, -20%
CC01	24232103	CD, 0.01μF, +80%, -20%
CC01	24814103	Chip, 0.01μF, +80%, -20%
CC03	24781220	Chip, 22pF, SL
CC07	24781100	Chip, 10pF, ±0.5%, SL
CC08	24815102	Chip, 1000pF, ±10%, B
CC09	24815102	Chip, 1000pF, ±10%, B
CC10	24815102	Chip, 1000pF, ±10%, B
CD01	24793222	EL, 2200μF, 10V
CD01	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD02	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD03	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD04	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD05	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD06	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD07	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD08	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD101	24814103	Chip, 0.01μF, +80%, -20%
CD102	24814103	Chip, 0.01μF, +80%, -20%
CD103	24781330	Chip, 33pF, SL
CD104	24781330	Chip, 33pF, SL
CD105	24814103	Chip, 0.01μF, +80%, -20%
CD106	24203100	EL, 10μF, ±20%, 16V
CD107	24287103	Chip, 0.01μF, +80%, -20%
CD11	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD12	24814473	Chip, 0.047μF, +80%, -20%
CD13	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD14	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD15	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD16	24092293	Chip, 0.1μF, +80%,-20%, 25V
CD20	24815222	Chip, 2200pF, ±10%
CD203	24590123	PF, 0.012μF
CD204	24590123	PF, 0.012μF
CD205	24085988	EL, 1μF, ±20%, 50V, NP
CD206	24085988	EL, 1μF, ±20%, 50V, NP
CD207	24590822	PF, 8200pF
CD208	24590822	PF, 8200pF
CD209	24815102	Chip, 1000pF, ±10%, B
CD210	24203100	EL, 10μF, ±20%, 16V
CD211	24287103	Chip, 0.01μF, +80%, -20%
CD212	24287103	Chip, 0.01μF, +80%, -20%
CD213	24287103	Chip, 0.01μF, +80%, -20%
CD214	24203101	EL, 100μF, ±20%, 16V
CD215	24203470	EL, 47μF, ±20%, 16V
CD23	24203100	EL, 10μF, ±20%, 16V
CD24	24092293	Chip, 0.1μF, +80%,-20%, 25V

Location No.	Part No.	Description
CD25	24815222	Chip, 2200pF, ±10%
CD26	24203100	EL, 10μF, ±20%, 16V
CD27	24203100	EL, 10μF, ±20%, 16V
CD28	24202101	EL, 100μF, 10V
CD29	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD30	24203100	EL, 10μF, ±20%, 16V
CD31	24203220	EL, 22μF, ±20%, 16V
CD32	24206010	EL, 1μF, 50V
CD33	24590823	PF, 0.082μF
CD34	24538104	PF, 0.1μF
CD35	24567124	PF, 0.12μF
CD36	24781102	Chip, 1000pF, SL
CD38	24206010	EL, 1μF, 50V
CD39	24206010	EL, 1μF, 50V
CD40	24206010	EL, 1μF, 50V
CD41	24814103	Chip, 0.01μF, +80%, –20%
CD42	24203101	EL, 100μF, ±20%, 16V
CD43	24206010	EL, 1μF, 50V
CD44	24590273	PF, 0.027μF
CD45	24590822	PF, 8200pF
CD46	24567273	PF, 0.027μF
CD47	24206010	EL, 1μF, 50V
CD48	24567273	PF, 0.027μF
CD49	24590822	PF, 8200pF
CD50	24590822	PF, 8200pF
CD51	24203100	EL, 10μF, ±20%, 16V
CD52	24203100	EL, 10μF, ±20%, 16V
CD53	24203100	EL, 10μF, ±20%, 16V
CD54	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD55	24815222	Chip, 2200pF, ±10% , B
CD56	24814103	Chip, 0.01μF, +80%, –20%
CD57	24814103	Chip, 0.01μF, +80%, –20%
CD58	24202101	EL, 100μF, 10V
CD59	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD60	24815222	Chip, 2200pF, ±10% , B
CD63	24203100	EL, 10μF, ±20%, 16V
CD64	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD65	24815222	Chip, 2200pF, ±10% , B
CD66	24203100	EL, 10μF, ±20%, 16V
CD67	24203100	EL, 10μF, ±20%, 16V
CD68	24202101	EL, 100μF, 10V
CD69	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD70	24815222	Chip, 2200pF, ±10% , B
CD72	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD73	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD74	24665471	EL, 470μF, ±20%, 10V
CD75	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD76	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD77	24665471	EL, 470μF, ±20%, 10V
CD78	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD79	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD80	24665471	EL, 470μF, ±20%, 10V
CD81	24202221	EL, 220μF, ±20%, 10V
CD82	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD83	24202221	EL, 220μF, ±20%, 10V
CD84	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD85	24202221	EL, 220μF, ±20%, 10V
CD86	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD88	24794100	EL, 10μF, ±20%, 16V
CD89	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD91	24814103	Chip, 0.01μF, +80%, –20%
CD92	24203220	EL, 22μF, ±20%, 16V
CD93	24092293	Chip, 0.1μF, +80%,–20%, 25V
CD94	24092293	Chip, 0.1μF, +80%,–20%, 25V

Location No.	Part No.	Description
CF03	24567104	PF, 0.1μF
CF04	24766101	PF, 0.1μF
CF05	24766101	PF, 0.1μF
CF06	24774220	Chip, 22pF, CH
CF07	24774220	Chip, 22pF, CH
CF08	24567104	PF, 0.1μF
CF09	24567104	PF, 0.1μF
CF10	24206100	EL, 10μF, 50V
CF11	24567104	PF, 0.1μF
CF12	24814103	Chip, 0.01μF, +80%, –20%
CF14	24814103	Chip, 0.01μF, +80%, –20%
CF17	24794101	EL, 100μF, ±20%, 16V
CF18	24794101	EL, 100μF, ±20%, 16V
CF19	24814103	Chip, 0.01μF, +80%, –20%
CR01	24203100	EL, 10μF, ±20%, 16V
CR02	24203100	EL, 10μF, ±20%, 16V
CR03	24203100	EL, 10μF, ±20%, 16V
CR05	24814103	Chip, 0.01μF, +80%, –20%
CR06	24203100	EL, 10μF, ±20%, 16V
CR12	24203100	EL, 10μF, ±20%, 16V
CS01	24085944	EL, 2.2μF, ±20%, 50V, NP
CS02	24085944	EL, 2.2μF, ±20%, 50V, NP
CS03	24206229	EL, 2.2μF, 50V
CS04	24206229	EL, 2.2μF, 50V
CS05	24206229	EL, 2.2μF, 50V
CS06	24206229	EL, 2.2μF, 50V
CS07	24206229	EL, 2.2μF, 50V
CS08	24206229	EL, 2.2μF, 50V
CS09	24206010	EL, 1μF, 50V
CS12	24781102	Chip, 1000pF, SL
CS13	24781102	Chip, 1000pF, SL
CS14	24206100	EL, 10μF, 50V
CS15	24206100	EL, 10μF, 50V
CS17	24203100	EL, 10μF, ±20%, 16V
CS18	24203100	EL, 10μF, ±20%, 16V
CS19	24206478	EL, 0.47μF, 50V
CS22	24203100	EL, 10μF, ±20%, 16V
CS23	24203100	EL, 10μF, ±20%, 16V
CV01	24567103	PF, 0.01μF
CV02	24085970	EL, 10μF, ±20%, 16V, NP
CV03	24203100	EL, 10μF, ±20%, 16V
CV04	24203100	EL, 10μF, ±20%, 16V
CV05	24814103	Chip, 0.01μF, +80%, –20%
CV06	24203100	EL, 10μF, ±20%, 16V
CV08	24763102	EL, 1000μF, ±20%, 16V
CV09	24203100	EL, 10μF, ±20%, 16V
CV10	24085970	EL, 10μF, ±20%, 16V, NP
CV11	24781331	Chip, 330pF, SL
CV12	24092178	Chip, 0.1μF, ±10%, B
CV13	24814103	Chip, 0.01μF, +80%, –20%
CV14	24781102	Chip, 1000pF, SL
CV15	24781102	Chip, 1000pF, SL
CV16	24781102	Chip, 1000pF, SL
CV17	24781102	Chip, 1000pF, SL
CV18	24781102	Chip, 1000pF, SL
CV19	24781102	Chip, 1000pF, SL
CV21	24815153	Chip, 0.015μF
CV23	24203101	EL, 100μF, ±20%, 16V
CV24	24814103	Chip, 0.01μF, +80%, –20%
CV25	24763471	EL, 470μF, ±20%, 16V
CV31	24781102	Chip, 1000pF, SL
CV34	24781102	Chip, 1000pF, SL
CV35	24814103	Chip, 0.01μF, +80%, –20%
CV37	24781102	Chip, 1000pF, SL

Location No.	Part No.	Description
CV39	24203101	EL, 100μF, ±20%, 16V
CV40	24814103	Chip, 0.01μF, +80%, -20%
CV46	24212332	CD, 3300pF, ±10%
CV47	24212332	CD, 3300pF, ±10%
CV48	24212102	CD, 1000pF, ±10%
CV65	24203101	EL, 100μF, ±20%, 16V
CV66	24203101	EL, 100μF, ±20%, 16V
CV67	24763471	EL, 470μF, ±20%, 16V
CV68	24763471	EL, 470μF, ±20%, 16V
CV68B	23960136	Tape, Cotton Cloth
CZ08	24203100	EL, 10μF, ±20%, 16V
CZ09	24781220	Chip, 22pF, SL
CZ10	24781180	Chip, 18pF, SL
CZ11	24781100	Chip, 10pF, ±0.5%, SL
CZ12	24814103	Chip, 0.01μF, +80%, -20%
CZ13	24092178	Chip, 0.1μF, ±10%, B
CZ14	24206100	EL, 10μF, 50V
CZ15	24814103	Chip, 0.01μF, +80%, -20%
CZ16	24206010	EL, 1μF, 50V
CZ17	24814103	Chip, 0.01μF, +80%, -20%
CZ19	24781181	Chip, 180pF, SL
CZ20	24567103	PF, 0.01μF
CZ21	24781122	Chip, 1200pF
CZ22	24206100	EL, 10μF, 50V
CZ23	24092178	Chip, 0.1μF, ±10%, B
CZ24	24092178	Chip, 0.1μF, ±10%, B
CZ25	24763471	EL, 470μF, ±20%, 16V
CZ26	24814103	Chip, 0.01μF, +80%, -20%
CZ28	24814103	Chip, 0.01μF, +80%, -20%
CZ29	24092178	Chip, 0.1μF, ±10%, B
CZ30	24206100	EL, 10μF, 50V
CZ32	24781120	Chip, 12pF, SL
CZ33	24781120	Chip, 12pF, SL
CZ34	24781120	Chip, 12pF, SL
CZ35	24781120	Chip, 12pF, SL
CZ36	24092178	Chip, 0.1μF, ±10%, B
CZ45	24781100	Chip, 10pF, ±0.5%, SL
CZ50	24814103	Chip, 0.01μF, +80%, -20%

RESISTORS

R101	24382223	OMF, 22k ohm, 1W
R102	24366563	CF, 56k ohm
R201	24872102	Chip, 1k ohm, 1/16W
R202	24872102	Chip, 1k ohm, 1/16W
R203	24872271	Chip, 270 ohm, 1/16W
R205	24872222	Chip, 2200 ohm, 1/16W
R206	24872472	Chip, 4700 ohm, 1/16W
R207	24872822	Chip, 8200 ohm, 1/16W
R208	24366103	CF, 10k ohm
R208	24872473	Chip, 47k ohm, 1/16W
R209	24366103	CF, 10k ohm
R209	24872362	Chip, 3600 ohm, 1/16W
R210	24872271	Chip, 270 ohm, 1/16W
R211	24366273	CF, 27k ohm
R212	24872271	Chip, 270 ohm, 1/16W
R213	24872104	Chip, 100k ohm, 1/16W
R214	24872824	Chip, 820k ohm, 1/16W
R215	24872101	Chip, 100 ohm, 1/16W
R216	24872272	Chip, 2700 ohm, 1/16W
R217	24366392	CF, 3900 ohm
R217	24872822	Chip, 8200 ohm, 1/16W
R218	24872682	Chip, 6800 ohm, 1/16W
R219	24366563	CF, 56k ohm
R221	24872102	Chip, 1k ohm, 1/16W

Location No.	Part No.	Description
R223	24872102	Chip, 1k ohm, 1/16W
R224	24872102	Chip, 1k ohm, 1/16W
R226	24872561	Chip, 560 ohm, 1/16W
R227	24872102	Chip, 1k ohm, 1/16W
R227	24366682	CF, 6800 ohm
R228	24872472	Chip, 4700 ohm, 1/16W
R229	24872822	Chip, 8200 ohm, 1/16W
R230	24872223	Chip, 22k ohm, 1/16W
R231	24872122	Chip, 1200 ohm, 1/16W
R232	24872122	Chip, 1200 ohm, 1/16W
R234	24872473	Chip, 47k ohm, 1/16W
R235	24872103	Chip, 10k ohm, 1/16W
R236	24872103	Chip, 10k ohm, 1/16W
R237	24872471	Chip, 470 ohm, 1/16W
R240	24366102	CF, 1k ohm
R240	24872122	Chip, 1200 ohm, 1/16W
R273	24872473	Chip, 47k ohm, 1/16W
R274	24872102	Chip, 1k ohm, 1/16W
R275	24872101	Chip, 100 ohm, 1/16W
R276	24872683	Chip, 68k ohm, 1/16W
R277	24872103	Chip, 10k ohm, 1/16W
R301	24366102	CF, 1k ohm
R303	24321159	MF, 1.5 ohm, 1/2W
R304	24366823	CF, 82k ohm
R305	24322688	MF, 0.68 ohm, 1W
R312	24366153	CF, 15k ohm
R313	24366823	CF, 82k ohm
R315	24366684	CF, 680k ohm
R316	24366474	CF, 470k ohm
R318	24366471	CF, 470 ohm
R319	24366471	CF, 470 ohm
R320	24366101	CF, 100 ohm
R323	24872102	Chip, 1k ohm, 1/16W
R324	24872183	Chip, 18k ohm, 1/16W
R327	24339339	MF, 3.3 ohm, 2W
R329	24366103	CF, 10k ohm
R330	24366102	CF, 1k ohm
R331	24366224	CF, 220k ohm
R332	24872223	Chip, 22k ohm, 1/16W
R332	24553471	OMF, 470 ohm, 1W
R333	24872103	Chip, 10k ohm, 1/16W
R333	24366474	CF, 470k ohm
R335	24366393	CF, 39k ohm
R336	24383221	OMF, 220 ohm, 2W
R341	24366153	CF, 15k ohm
R343	24366183	CF, 18k ohm
R344	24383122	OMF, 1200 ohm, 2W
R370	24338159	MF, 1.5 ohm, 1W
R371	24366562	CF, 5600 ohm
R372	24366392	CF, 3900 ohm
R373	24366182	CF, 1800 ohm
R374	24366153	CF, 15k ohm
R399	24366684	CF, 680k ohm
R401	24872104	Chip, 100k ohm, 1/16W
R402	24872103	Chip, 10k ohm, 1/16W
R403	24872472	Chip, 4700 ohm, 1/16W
R405	24553682	OMF, 6800 ohm, 1W
R406	24872104	Chip, 100k ohm, 1/16W
R407	24872272	Chip, 2700 ohm, 1/16W
R408	24872103	Chip, 10k ohm, 1/16W
R410	24366151	CF, 150 ohm
R411	24366561	CF, 560 ohm
R415	24553272	OMF, 2700 ohm, 1W
R417	24510562	Cement, 5600 ohm, 5W

Location No.	Part No.	Description
R424	24366152	CF, 1500 ohm
R425	24366182	CF, 1800 ohm
R426	24366751	CF, 750 ohm
R427	24366392	CF, 3900 ohm
R428	24366561	CF, 560 ohm
R429	24552560	OMF, 56 ohm, 1/2W
R430	24872222	Chip, 2200 ohm, 1/16W
R434	24552101	OMF, 100 ohm, 1/2W
R441	24532102	FR, 1k ohm, 1W
R442	24533151	FR, 150 ohm, 2W
R450	24321229	MF, 2.2 ohm, 1/2W
R460	24552332	OMF, 3300 ohm, 1/2W
R461	24552242	OMF, 2400 ohm, 1/2W
R463	24323479	OMF, 4.7 ohm, 2W
R464	24366273	CF, 27k ohm
R465	24366114	CF, 110k ohm
R466	24366562	CF, 5600 ohm
R469	24000211	FR, 15 ohm, 1/2W
R470	24339568	OMF, 0.56 ohm, 2W
R471	24531271	FR, 270 ohm, 1/2W
R473	24366183	CF, 18k ohm
R474	24366184	CF, 180k ohm
R479	24531680	FR, 68 ohm, 1/2W
R480	24552222	OMF, 2200 ohm, 1/2W
R490	24366101	CF, 100 ohm
R491	24366101	CF, 100 ohm
R492	24366272	CF, 2700 ohm
R501	24872273	Chip, 27k ohm, 1/16W
R505	24872102	Chip, 1k ohm, 1/16W
R506	24872103	Chip, 10k ohm, 1/16W
R508	24872102	Chip, 1k ohm, 1/16W
R509	24872102	Chip, 1k ohm, 1/16W
R510	24872102	Chip, 1k ohm, 1/16W
R511	24872101	Chip, 100 ohm, 1/16W
R515	24872103	Chip, 10k ohm, 1/16W
R516	24872222	Chip, 2200 ohm, 1/16W
R601	24366272	CF, 2700 ohm
R602	24366272	CF, 2700 ohm
R603	24366562	CF, 5600 ohm
R604	24366562	CF, 5600 ohm
R606	24366229	CF, 2.2 ohm
R609	24366563	CF, 56k ohm
R610	24366103	CF, 10k ohm
R611	24366103	CF, 10k ohm
R612	24366103	CF, 10k ohm
R613	24366331	CF, 330 ohm
R614	24366103	CF, 10k ohm
R615	24366229	CF, 2.2 ohm
R620	24366562	CF, 5600 ohm
R621	24366562	CF, 5600 ohm
R622	24366392	CF, 3900 ohm
R623	24366392	CF, 3900 ohm
R626	24366229	CF, 2.2 ohm
R627	24366229	CF, 2.2 ohm
R628	24366104	CF, 100k ohm
R629	24366223	CF, 22k ohm
R630	24366223	CF, 22k ohm
R631	24366333	CF, 33k ohm
R632	24366183	CF, 18k ohm
R633	24366563	CF, 56k ohm
R634	24366683	CF, 68k ohm
R635	24366104	CF, 100k ohm
R636	24366473	CF, 47k ohm
R637	24366473	CF, 47k ohm

Location No.	Part No.	Description
R638	24366223	CF, 22k ohm
R639	24366821	CF, 820 ohm
R640	24366563	CF, 56k ohm
R641	24366109	CF, 1 ohm
R642	24366223	CF, 22k ohm
R643	24366102	CF, 1k ohm
R644	24366104	CF, 100k ohm
R645	24366273	CF, 27k ohm
R646	24366104	CF, 100k ohm
R647	24366563	CF, 56k ohm
R648	24366563	CF, 56k ohm
R649	24366223	CF, 22k ohm
R650	24366821	CF, 820 ohm
R651	24366563	CF, 56k ohm
R652	24366109	CF, 1 ohm
R660	24366103	CF, 10k ohm
R661	24552391	OMF, 390 ohm, 1/2W
R661	24366223	CF, 22k ohm
R662	24552391	OMF, 390 ohm, 1/2W
R662	24366224	CF, 220k ohm
R663	24366472	CF, 4700 ohm
R664	24366472	CF, 4700 ohm
R665	24366224	CF, 220k ohm
R671	24366102	CF, 1k ohm
R672	24366102	CF, 1k ohm
R673	24366102	CF, 1k ohm
R674	24366102	CF, 1k ohm
R676	24872223	Chip, 22k ohm, 1/16W
R677	24872223	Chip, 22k ohm, 1/16W
R678	24872223	Chip, 22k ohm, 1/16W
R679	24872223	Chip, 22k ohm, 1/16W
R680	24872223	Chip, 22k ohm, 1/16W
R680	24366104	CF, 100k ohm
R681	24872223	Chip, 22k ohm, 1/16W
R683	24366223	CF, 22k ohm
R684	24366223	CF, 22k ohm
R685	24366331	CF, 330 ohm
R686	24366224	CF, 220k ohm
R690	24872681	Chip, 680 ohm, 1/16W
R691	24872681	Chip, 680 ohm, 1/16W
R692	24872681	Chip, 680 ohm, 1/16W
R693	24872681	Chip, 680 ohm, 1/16W
R702	24366222	CF, 2200 ohm
R709	24366563	CF, 56k ohm
R713	24366393	CF, 39k ohm
R714	24552121	OMF, 120 ohm, 1/2W
R715	24366223	CF, 22k ohm
R716	24366273	CF, 27k ohm
R717	24366333	CF, 33k ohm
R718	24366222	CF, 2200 ohm
R719	24366392	CF, 3900 ohm
R720	24366392	CF, 3900 ohm
R721	24366102	CF, 1k ohm
R722	24552471	OMF, 470 ohm, 1/2W
R723	24366471	CF, 470 ohm
R724	24366470	CF, 47 ohm
R725	24366182	CF, 1800 ohm
R730	24552100	OMF, 10 ohm, 1/2W
R731	24552331	OMF, 330 ohm, 1/2W
R732	24366820	CF, 82 ohm
R733	24366683	CF, 68k ohm
R734	24366820	CF, 82 ohm
R735	24366683	CF, 68k ohm
R736	24366620	CF, 62 ohm

Location No.	Part No.	Description
R737	24366152	CF, 1500 ohm
R738	24366123	CF, 12k ohm
R739	24366152	CF, 1500 ohm
R740	24366620	CF, 62 ohm
R741	24366279	CF, 2.9 ohm
R742	24366279	CF, 2.9 ohm
R743	24554221	OMF, 220 ohm, 2W
R744	24366122	CF, 1200 ohm
R745	24366122	CF, 1200 ohm
⚠R801	24009954	Metal-Glazed Resistor, 2.2M ohm, 1/2W
R802	24321568	MF, 0.56 ohm, 1/2W
R803	24382683	OMF, 68k ohm, 1W
R805	24552101	OMF, 100 ohm, 1/2W
R806	24552392	OMF, 3900 ohm, 1/2W
R808	24019340	PTC Thermistor, 290V
R810	24007489	Cement, 3.0 ohm, 20W
R811	24568271	Cement, 270 ohm, 7W
R814	24366122	CF, 1200 ohm
R815	24552102	OMF, 1k ohm, 1/2W
R816	24323689	MF, 6.8 ohm, 2W
R818	24322228	MF, 0.22 ohm, 1W
R819	24321229	MF, 2.2 ohm, 1/2W
R821	24366101	CF, 100 ohm
R822	24552103	OMF, 10k ohm, 1/2W
R823	24366272	CF, 2700 ohm
R824	24569101	Cement, 100 ohm, 10W
R827	24366681	CF, 680 ohm
R828	24366821	CF, 820 ohm
R829	24322228	MF, 0.22 ohm, 1W
R831	24366471	CF, 470 ohm
R833	24366471	CF, 470 ohm
R841	24531120	FR, 12 ohm, 1/2W
R842	24552392	OMF, 3900 ohm, 1/2W
R846	24366561	CF, 560 ohm
R847	24366472	CF, 4700 ohm
R850	24321479	MF, 4.7 ohm, 1/2W
R851	24366102	CF, 1k ohm
R852	24366391	CF, 390 ohm
R860	24366102	CF, 1k ohm
R861	24367273	CF, 27k ohm, ±2%
R862	24366562	CF, 5600 ohm
R863	24366101	CF, 100 ohm
R864	24381220	OMF, 22 ohm, 1/2W
R865	24366222	CF, 2200 ohm
R866	24366332	CF, 3300 ohm
R867	24366103	CF, 10k ohm
R868	24568150	Cement, 15 ohm, 7W
R869	24322278	MF, 0.27 ohm, 1W
R870	24322228	MF, 0.22 ohm, 1W
R871	24366621	CF, 620 ohm
R872	24553683	OMF, 68k ohm, 1W
R873	24568229	Cement, 2.2 ohm, 7W
R874	24531330	FR, 33 ohm, 1/2W
R875	24366332	CF, 3300 ohm
R876	24366562	CF, 5600 ohm
R877	24366562	CF, 5600 ohm
R885	24366104	CF, 100k ohm
R886	24366683	CF, 68k ohm
R887	24366332	CF, 3300 ohm
R890	24553333	OMF, 33k ohm, 1W
R893	24569103	Cement, 10k ohm, 10W
R894	24366334	CF, 330k ohm
R895	24366393	CF, 39k ohm

Location No.	Part No.	Description
R896	24366562	CF, 5600 ohm
R897	24366334	CF, 330k ohm
⚠R899	24005007	Metal-Glazed Resistor, 8.2M ohm, 1W
R901	24376561	CF, 560 ohm, 1/2W
R902	24376561	CF, 560 ohm, 1/2W
R903	24376561	CF, 560 ohm, 1/2W
R904	24366472	CF, 4700 ohm
R905	24366150	CF, 15 ohm
R909	24366222	CF, 2200 ohm
R912	24366102	CF, 1k ohm
R914	24366561	CF, 560 ohm
R915	24366101	CF, 100 ohm
R916	24366111	CF, 110 ohm
R917	24366271	CF, 270 ohm
R918	24366180	CF, 18 ohm
R919	24366102	CF, 1k ohm
R920	24000940	FR, 2 ohm, 2W
R921	24366561	CF, 560 ohm
R922	24366101	CF, 100 ohm
R924	24366180	CF, 18 ohm
R925	24366271	CF, 270 ohm
R926	24366102	CF, 1k ohm
R928	24366561	CF, 560 ohm
R929	24366101	CF, 100 ohm
R930	24366180	CF, 18 ohm
R932	24366332	CF, 3300 ohm
R933	24366750	CF, 75 ohm
R934	24366391	CF, 390 ohm
R935	24366821	CF, 820 ohm
R936	24366750	CF, 75 ohm
R937	24366271	CF, 270 ohm
R938	24366750	CF, 75 ohm
R939	24366181	CF, 180 ohm
R942	24366392	CF, 3900 ohm
R943	24366392	CF, 3900 ohm
R944	24366392	CF, 3900 ohm
R945	24366111	CF, 110 ohm
R946	24366111	CF, 110 ohm
R950	24060356	VR, 20M ohm, 0.6W
R960	24383153	OMF, 15k ohm, 2W
R961	24383153	OMF, 15k ohm, 2W
R962	24383153	OMF, 15k ohm, 2W
R963	24383153	OMF, 15k ohm, 2W
R964	24383153	OMF, 15k ohm, 2W
R965	24383153	OMF, 15k ohm, 2W
R977	24366122	CF, 1200 ohm
R980	24366471	CF, 470 ohm
R981	24366821	CF, 820 ohm
R982	24366103	CF, 10k ohm
R983	24366222	CF, 2200 ohm
R984	24367152	CF, 1500 ohm, ±2%
R985	24367471	CF, 470 ohm, ±2%
R986	24367681	CF, 680 ohm, ±2%
R987	24367681	CF, 680 ohm, ±2%
R988	24367472	CF, 4700 ohm, ±2%
R989	24367332	CF, 3300 ohm, ±2%
R990	24366242	CF, 2400 ohm
R991	24367681	CF, 680 ohm, ±2%
R992	24366150	CF, 15 ohm
RA03	24366102	CF, 1k ohm
RA04	24366102	CF, 1k ohm
RA05	24366102	CF, 1k ohm
RA07	24366102	CF, 1k ohm

Location No.	Part No.	Description
RA08	24366102	CF, 1k ohm
RA10	24366101	CF, 100 ohm
RA11	24366472	CF, 4700 ohm
RA12	24366472	CF, 4700 ohm
RA13	24366153	CF, 15k ohm
RA14	24366153	CF, 15k ohm
RA15	24366103	CF, 10k ohm
RA16	24366102	CF, 1k ohm
RA17	24366102	CF, 1k ohm
RA18	24366102	CF, 1k ohm
RA22	24366102	CF, 1k ohm
RA24	24366102	CF, 1k ohm
RA26	24366102	CF, 1k ohm
RA27	24366102	CF, 1k ohm
RA28	24366102	CF, 1k ohm
RA29	24366104	CF, 100k ohm
RA30	24366103	CF, 10k ohm
RA31	24366561	CF, 560 ohm
RA32	24366222	CF, 2200 ohm
RA33	24366103	CF, 10k ohm
RA35	24366102	CF, 1k ohm
RA36	24366472	CF, 4700 ohm
RA37	24366101	CF, 100 ohm
RA38	24366101	CF, 100 ohm
RA39	24366102	CF, 1k ohm
RA40	24366331	CF, 330 ohm
RA41	24366273	CF, 27k ohm
RA61	24366103	CF, 10k ohm
RA62	24366103	CF, 10k ohm
RA64	24366223	CF, 22k ohm
RA65	24366103	CF, 10k ohm
RA66	24366103	CF, 10k ohm
RA67	24366472	CF, 4700 ohm
RA70	24366333	CF, 33k ohm
RA71	24366683	CF, 68k ohm
RA72	24366223	CF, 22k ohm
RA73	24366103	CF, 10k ohm
RA75	24366333	CF, 33k ohm
RA76	24366103	CF, 10k ohm
RA78	24366102	CF, 1k ohm
RA509	24872391	Chip, 390 ohm, 1/16W
RA510	24872391	Chip, 390 ohm, 1/16W
RB01	24366271	CF, 270 ohm
RB02	24366271	CF, 270 ohm
RB03	24366101	CF, 100 ohm
RB09	24366470	CF, 47 ohm
RB10	24366103	CF, 10k ohm
RB11	24366101	CF, 100 ohm
RB30	24366103	CF, 10k ohm
RB40	24366103	CF, 10k ohm
RB41	24366182	CF, 1800 ohm
RB42	24366102	CF, 1k ohm
RB43	24366103	CF, 10k ohm
RB44	24366103	CF, 10k ohm
RB45	24366101	CF, 100 ohm
RB81	24366122	CF, 1200 ohm
RB82	24366123	CF, 12k ohm
RB83	24366123	CF, 12k ohm
RB84	24366562	CF, 5600 ohm
RB90	24366392	CF, 3900 ohm
RB91	24366473	CF, 47k ohm
RB92	24366271	CF, 270 ohm
RB93	24366271	CF, 270 ohm
RB94	24366222	CF, 2200 ohm

Location No.	Part No.	Description
RB95	24366222	CF, 2200 ohm
RB96	24366273	CF, 27k ohm
RB97	24366273	CF, 27k ohm
RB98	24366102	CF, 1k ohm
RD01	24872101	Chip, 100 ohm, 1/16W
RD03	24871101	Chip, 100 ohm, 1/8W
RD04	24871101	Chip, 100 ohm, 1/8W
RD05	24872101	Chip, 100 ohm, 1/16W
RD06	24872101	Chip, 100 ohm, 1/16W
RD09	24872101	Chip, 100 ohm, 1/16W
RD10	24872101	Chip, 100 ohm, 1/16W
RD11	24872222	Chip, 2200 ohm, 1/16W
RD12	24872103	Chip, 10k ohm, 1/16W
RD13	24872101	Chip, 100 ohm, 1/16W
RD21	24872221	Chip, 220 ohm, 1/16W
RD23	24872221	Chip, 220 ohm, 1/16W
RD27	24872101	Chip, 100 ohm, 1/16W
RD28	24872101	Chip, 100 ohm, 1/16W
RD29	24872101	Chip, 100 ohm, 1/16W
RD30	24872223	Chip, 22k ohm, 1/16W
RD31	24872223	Chip, 22k ohm, 1/16W
RD32	24872223	Chip, 22k ohm, 1/16W
RD33	24872101	Chip, 100 ohm, 1/16W
RD34	24872102	Chip, 1k ohm, 1/16W
RD35	24872102	Chip, 1k ohm, 1/16W
RD36	24872101	Chip, 100 ohm, 1/16W
RD39	24872101	Chip, 100 ohm, 1/16W
RD40	24872101	Chip, 100 ohm, 1/16W
RD41	24872223	Chip, 22k ohm, 1/16W
RD42	24872101	Chip, 100 ohm, 1/16W
RD43	24872101	Chip, 100 ohm, 1/16W
RD44	24872101	Chip, 100 ohm, 1/16W
RD51	24872221	Chip, 220 ohm, 1/16W
RD53	24872221	Chip, 220 ohm, 1/16W
RD61	24872221	Chip, 220 ohm, 1/16W
RD63	24872221	Chip, 220 ohm, 1/16W
RD71	24366100	CF, 10 ohm
RD75	24366100	CF, 10 ohm
RD79	24366100	CF, 10 ohm
RD81	24321109	MF, 1 ohm, 1/2W
RD82	24871151	Chip, 150 ohm, 1/8W
RD85	24872151	Chip, 150 ohm, 1/16W
RD87	24872151	Chip, 150 ohm, 1/16W
RD88	24872222	Chip, 2200 ohm, 1/16W
RD89	24872151	Chip, 150 ohm, 1/16W
RD92	24872473	Chip, 47k ohm, 1/16W
RD93	24872222	Chip, 2200 ohm, 1/16W
RD94	24872101	Chip, 100 ohm, 1/16W
RD101	24872331	Chip, 330 ohm, 1/16W
RD102	24872331	Chip, 330 ohm, 1/16W
RD103	24872331	Chip, 330 ohm, 1/16W
RD104	24872331	Chip, 330 ohm, 1/16W
RD105	24872472	Chip, 4700 ohm, 1/16W
RD106	24872472	Chip, 4700 ohm, 1/16W
RD107	24872472	Chip, 4700 ohm, 1/16W
RD108	24872472	Chip, 4700 ohm, 1/16W
RD109	24872472	Chip, 4700 ohm, 1/16W
RD110	24872472	Chip, 4700 ohm, 1/16W
RD111	24872101	Chip, 100 ohm, 1/16W
RD112	24872101	Chip, 100 ohm, 1/16W
RD113	24872472	Chip, 4700 ohm, 1/16W
RD201	24872101	Chip, 100 ohm, 1/16W
RD202	24872101	Chip, 100 ohm, 1/16W
RD203	24872392	Chip, 3900 ohm, 1/16W

Location No.	Part No.	Description
RD204	24872392	Chip, 3900 ohm, 1/16W
RD205	24872101	Chip, 100 ohm, 1/16W
RD206	24872101	Chip, 100 ohm, 1/16W
RD207	24872104	Chip, 100k ohm, 1/16W
RD208	24872472	Chip, 4700 ohm, 1/16W
RD209	24872472	Chip, 4700 ohm, 1/16W
RF01	24872332	Chip, 3300 ohm, 1/16W
RF02	24872103	Chip, 10k ohm, 1/16W
RF03	24872682	Chip, 6800 ohm, 1/16W
RF04	24872223	Chip, 22k ohm, 1/16W
RF06	24872683	Chip, 68k ohm, 1/16W
RF08	24872100	Chip, 10 ohm, 1/16W
RF09	24872100	Chip, 10 ohm, 1/16W
RF10	24872100	Chip, 10 ohm, 1/16W
RF11	24872103	Chip, 10k ohm, 1/16W
RF12	24872101	Chip, 100 ohm, 1/16W
RF13	24872101	Chip, 100 ohm, 1/16W
RF14	24872101	Chip, 100 ohm, 1/16W
RF15	24872103	Chip, 10k ohm, 1/16W
RF16	24872471	Chip, 470 ohm, 1/16W
RF20	24872472	Chip, 4700 ohm, 1/16W
RF21	24000824	Chip, Jumper, 2125 type
RF22	24872102	Chip, 1k ohm, 1/16W
RF24	24872102	Chip, 1k ohm, 1/16W
RF26	24872102	Chip, 1k ohm, 1/16W
RF27	24872103	Chip, 10k ohm, 1/16W
RF28	24872102	Chip, 1k ohm, 1/16W
RF29	24872103	Chip, 10k ohm, 1/16W
RF30	24872103	Chip, 10k ohm, 1/16W
RF38	24872153	Chip, 15k ohm, 1/16W
RR01	24872103	Chip, 10k ohm, 1/16W
RR02	24872103	Chip, 10k ohm, 1/16W
RR03	24872103	Chip, 10k ohm, 1/16W
RR12	24872102	Chip, 1k ohm, 1/16W
RR13	24872564	Chip, 560k ohm, 1/16W
RR14	24872564	Chip, 560k ohm, 1/16W
RR15	24872564	Chip, 560k ohm, 1/16W
RR18	24872102	Chip, 1k ohm, 1/16W
RR20	24872103	Chip, 10k ohm, 1/16W
RR21	24872103	Chip, 10k ohm, 1/16W
RR22	24872222	Chip, 2200 ohm, 1/16W
RR23	24872101	Chip, 100 ohm, 1/16W
RR24	24872101	Chip, 100 ohm, 1/16W
RR25	24872101	Chip, 100 ohm, 1/16W
RR26	24872101	Chip, 100 ohm, 1/16W
RR27	24872221	Chip, 220 ohm, 1/16W
RR28	24872221	Chip, 220 ohm, 1/16W
RR28	24872473	Chip, 47k ohm, 1/16W
RR29	24872221	Chip, 220 ohm, 1/16W
RR29	24872473	Chip, 47k ohm, 1/16W
RR30	24872103	Chip, 10k ohm, 1/16W
RR31	24872391	Chip, 390 ohm, 1/16W
RR32	24872472	Chip, 4700 ohm, 1/16W
RR33	24872123	Chip, 12k ohm, 1/16W
RS01	24872681	Chip, 680 ohm, 1/16W
RS02	24872681	Chip, 680 ohm, 1/16W
RS03	24872101	Chip, 100 ohm, 1/16W
RS04	24872101	Chip, 100 ohm, 1/16W
RS05	24872472	Chip, 4700 ohm, 1/16W
RS06	24872472	Chip, 4700 ohm, 1/16W
RS07	24872472	Chip, 4700 ohm, 1/16W
RS08	24872472	Chip, 4700 ohm, 1/16W
RS09	24872472	Chip, 4700 ohm, 1/16W
RS10	24872472	Chip, 4700 ohm, 1/16W

Location No.	Part No.	Description
RS11	24872101	Chip, 100 ohm, 1/16W
RS13	24872101	Chip, 100 ohm, 1/16W
RS14	24872101	Chip, 100 ohm, 1/16W
RS15	24872104	Chip, 100k ohm, 1/16W
RS16	24872104	Chip, 100k ohm, 1/16W
RS17	24872223	Chip, 22k ohm, 1/16W
RS18	24872223	Chip, 22k ohm, 1/16W
RS19	24872102	Chip, 1k ohm, 1/16W
RS20	24872102	Chip, 1k ohm, 1/16W
RS21	24872222	Chip, 2200 ohm, 1/16W
RS22	24872222	Chip, 2200 ohm, 1/16W
RS23	24872101	Chip, 100 ohm, 1/16W
RS24	24872101	Chip, 100 ohm, 1/16W
RS27	24872104	Chip, 100k ohm, 1/16W
RS28	24872104	Chip, 100k ohm, 1/16W
RS29	24872223	Chip, 22k ohm, 1/16W
RS30	24872223	Chip, 22k ohm, 1/16W
RS31	24872103	Chip, 10k ohm, 1/16W
RS32	24872104	Chip, 100k ohm, 1/16W
RS35	24872223	Chip, 22k ohm, 1/16W
RS36	24872223	Chip, 22k ohm, 1/16W
RS37	24872104	Chip, 100k ohm, 1/16W
RS38	24872104	Chip, 100k ohm, 1/16W
RS43	24872681	Chip, 680 ohm, 1/16W
RS44	24872681	Chip, 680 ohm, 1/16W
RS45	24872681	Chip, 680 ohm, 1/16W
RS46	24872681	Chip, 680 ohm, 1/16W
RV01	24872101	Chip, 100 ohm, 1/16W
RV02	24872101	Chip, 100 ohm, 1/16W
RV03	24872101	Chip, 100 ohm, 1/16W
RV04	24872101	Chip, 100 ohm, 1/16W
RV05	24872101	Chip, 100 ohm, 1/16W
RV06	24872101	Chip, 100 ohm, 1/16W
RV07	24872162	Chip, 1600 ohm, 1/16W
RV08	24872162	Chip, 1600 ohm, 1/16W
RV09	24872101	Chip, 100 ohm, 1/16W
RV10	24872101	Chip, 100 ohm, 1/16W
RV12	24872681	Chip, 680 ohm, 1/16W
RV13	24872681	Chip, 680 ohm, 1/16W
RV14	24872101	Chip, 100 ohm, 1/16W
RV18	24872123	Chip, 12k ohm, 1/16W
RV19	24872101	Chip, 100 ohm, 1/16W
RV20	24872101	Chip, 100 ohm, 1/16W
RV21	24366100	CF, 10 ohm
RV21	24872102	Chip, 1k ohm, 1/16W
RV22	24366222	CF, 2200 ohm
RV22	24872391	Chip, 390 ohm, 1/16W
RV23	24552101	OMF, 100 ohm, 1/2W
RV25	24872101	Chip, 100 ohm, 1/16W
RV26	24366181	CF, 180 ohm
RV27	24872750	Chip, 75 ohm, 1/16W
RV28	24872683	Chip, 68k ohm, 1/16W
RV29	24872273	Chip, 27k ohm, 1/16W
RV30	24872750	Chip, 75 ohm, 1/16W
RV31	24872750	Chip, 75 ohm, 1/16W
RV32	24872750	Chip, 75 ohm, 1/16W
RV33	24872123	Chip, 12k ohm, 1/16W
RV34	24872123	Chip, 12k ohm, 1/16W
RV35	24872103	Chip, 10k ohm, 1/16W
RV37	24872750	Chip, 75 ohm, 1/16W
RV60	24872102	Chip, 1k ohm, 1/16W
RV61	24552101	OMF, 100 ohm, 1/2W
RV62	24872101	Chip, 100 ohm, 1/16W
RV63	24552151	OMF, 150 ohm, 1/2W

Location No.	Part No.	Description
RV64	24872750	Chip, 75 ohm, 1/16W
RV65	24552101	OMF, 100 ohm, 1/2W
RV66	24872101	Chip, 100 ohm, 1/16W
RV67	24552151	OMF, 150 ohm, 1/2W
RV68	24872750	Chip, 75 ohm, 1/16W
RV70	24872101	Chip, 100 ohm, 1/16W
RV71	24872472	Chip, 4700 ohm, 1/16W
RV80	24366681	CF, 680 ohm
RV81	24872750	Chip, 75 ohm, 1/16W
RV82	24872101	Chip, 100 ohm, 1/16W
RV83	24366681	CF, 680 ohm
RV83	24872473	Chip, 47k ohm, 1/16W
RV84	24872473	Chip, 47k ohm, 1/16W
RV85	24872560	Chip, 56 ohm, 1/16W
RV86	24872560	Chip, 56 ohm, 1/16W
RV87	24872560	Chip, 56 ohm, 1/16W
RV88	24872682	Chip, 6800 ohm, 1/16W
RV89	24872750	Chip, 75 ohm, 1/16W
RV90	24872681	Chip, 680 ohm, 1/16W
RV91	24872681	Chip, 680 ohm, 1/16W
RV98	24872103	Chip, 10k ohm, 1/16W
RV98	24872101	Chip, 100 ohm, 1/16W
RZ01	24872471	Chip, 470 ohm, 1/16W
RZ02	24872152	Chip, 1500 ohm, 1/16W
RZ04	24872332	Chip, 3300 ohm, 1/16W
RZ05	24872332	Chip, 3300 ohm, 1/16W
RZ06	24872821	Chip, 820 ohm, 1/16W
RZ07	24872272	Chip, 2700 ohm, 1/16W
RZ08	24872332	Chip, 3300 ohm, 1/16W
RZ12	24872471	Chip, 470 ohm, 1/16W
RZ18	24872821	Chip, 820 ohm, 1/16W
RZ19	24872471	Chip, 470 ohm, 1/16W
RZ20	24872122	Chip, 1200 ohm, 1/16W
RZ23	24872821	Chip, 820 ohm, 1/16W
RZ24	24872821	Chip, 820 ohm, 1/16W
RZ25	24872101	Chip, 100 ohm, 1/16W
RZ26	24872101	Chip, 100 ohm, 1/16W
RZ28	24872821	Chip, 820 ohm, 1/16W
RZ29	24872331	Chip, 330 ohm, 1/16W
RZ30	24872331	Chip, 330 ohm, 1/16W

COILS & TRANSFORMERS

L101	23221803	Coil, Choke, TLN3040D
L230	23289100	Coil, Peaking, TRF4100AF
L301	23103859	Coil (Ferrite Bead), TEM2011
L302	23237975	Coil, Peaking, TRF4101AC
L410	23103859	Coil (Ferrite Bead), TEM2011
L441	23233953	Coil, Linearity, TLN2131G
L442	23248122	Coil, Choke, TLN3384D
L444	23221684	Coil, Choke, TLN3191D
L449	23103859	Coil (Ferrite Bead), TEM2011
L461	23248179	Coil, Choke, TLN3339AD
L503	23289100	Coil, Peaking, TRF4100AF
L505	23289100	Coil, Peaking, TRF4100AF
L508	23289100	Coil, Peaking, TRF4100AF
L601	23238714	Coil, Peaking, TRF4100AJ
L602	23238714	Coil, Peaking, TRF4100AJ
L603	23238562	Coil, Peaking, TRF4109AJ
L604	23238562	Coil, Peaking, TRF4109AJ
L643	23103859	Coil (Ferrite Bead), TEM2011
L644	23103859	Coil (Ferrite Bead), TEM2011
L671	23103859	Coil (Ferrite Bead), TEM2011
L672	23103859	Coil (Ferrite Bead), TEM2011
L676	23103832	Chip Bead, TEM2125

Location No.	Part No.	Description
L677	23103832	Chip Bead, TEM2125
L682	23103832	Chip Bead, TEM2125
L683	23103832	Chip Bead, TEM2125
L684	23289109	Coil, Peaking, TRF41R0AF
L685	23289109	Coil, Peaking, TRF41R0AF
L702	23261974	Coil, Choke, HC5-035
L704	23103859	Coil (Ferrite Bead), TEM2011
L705	23103859	Coil (Ferrite Bead), TEM2011
L801	23217361	Coil, Choke, TPW2009AZ
L811	23103859	Coil (Ferrite Bead), TEM2011
L814	23221747	Coil, Choke, TRF9253D
L815	23103937	Coil (Ferrite Bead), TEM2004
L820	23103859	Coil (Ferrite Bead), TEM2011
L821	23103859	Coil (Ferrite Bead), TEM2011
L823	23103859	Coil (Ferrite Bead), TEM2011
L824	23103859	Coil (Ferrite Bead), TEM2011
L825	23103859	Coil (Ferrite Bead), TEM2011
L826	23103859	Coil (Ferrite Bead), TEM2011
L827	23280016	Coil, Peaking, TRF4100AZ
L828	23248087	Coil, Choke, TLN3312D
L829	23280016	Coil, Peaking, TRF4100AZ
L830	23280016	Coil, Peaking, TRF4100AZ
L870	23103859	Coil (Ferrite Bead), TEM2011
L871	23103859	Coil (Ferrite Bead), TEM2011
L872	23103859	Coil (Ferrite Bead), TEM2011
L883	23221747	Coil, Choke, TRF9253D
L885	23248073	Coil, Choke, TLN3299D
L891	23103859	Coil (Ferrite Bead), TEM2011
L892	23103859	Coil (Ferrite Bead), TEM2011
L893	23280016	Coil, Peaking, TRF4100AZ
L894	23280016	Coil, Peaking, TRF4100AZ
L896	23103859	Coil (Ferrite Bead), TEM2011
L897	23280016	Coil, Peaking, TRF4100AZ
⚠L901	23200324	Coil, Degaussing, TSB-2378AR
L902	23289101	Coil, Peaking, TRF4101AF
L903	23289101	Coil, Peaking, TRF4101AF
L904	23289101	Coil, Peaking, TRF4101AF
L905	23289390	Coil, Peaking, TRF4390AF
L906	23289390	Coil, Peaking, TRF4390AF
L907	23289390	Coil, Peaking, TRF4390AF
L908	23289100	Coil, Peaking, TRF4100AF
L910	23289829	Coil, Peaking, TRF48R3AF
LA01	23289100	Coil, Peaking, TRF4100AF
LD81	23289479	Coil, Peaking, TRF44R7AF
LD82	23103859	Coil (Ferrite Bead), TEM2011
LD83	23103859	Coil (Ferrite Bead), TEM2011
LD89	23289470	Coil, Peaking, TRF4470AF
LD101	23238714	Coil, Peaking, TRF4100AJ
LF01	23238506	Coil, Peaking, TRF4229AJ
LF02	23238506	Coil, Peaking, TRF4229AJ
LF03	23238506	Coil, Peaking, TRF4229AJ
LF04	23238506	Coil, Peaking, TRF4229AJ
LF05	23238506	Coil, Peaking, TRF4229AJ
LF06	23238562	Coil, Peaking, TRF4109AJ
LF07	23238562	Coil, Peaking, TRF4109AJ
LF08	23238714	Coil, Peaking, TRF4100AJ
LF09	23238714	Coil, Peaking, TRF4100AJ
LF10	23238562	Coil, Peaking, TRF4109AJ
LF11	23289109	Coil, Peaking, TRF41R0AF
LF13	23289100	Coil, Peaking, TRF4100AF
LF17	23289100	Coil, Peaking, TRF4100AF
LV06	23103832	Chip Bead, TEM2125
LV07	23103832	Chip Bead, TEM2125
LV09	23289100	Coil, Peaking, TRF4100AF

Location No.	Part No.	Description
LV42	23289100	Coil, Peaking, TRF4100AF
LV43	23289100	Coil, Peaking, TRF4100AF
LV49	23103824	Filter, TEM2028K
LZ01	23289150	Coil, Peaking, TRF4150AF
LZ03	23238716	Coil, Peaking, TRF4689AJ
LZ04	23238709	Coil, Peaking, TRF4270AJ
LZ05	23238716	Coil, Peaking, TRF4689AJ
LZ06	23238709	Coil, Peaking, TRF4270AJ
LZ07	23238709	Coil, Peaking, TRF4270AJ
LZ08	23238707	Coil, Peaking, TRF4390AJ
LZ09	70131060	Filter, ZBF253D-00
LZ10	70131060	Filter, ZBF253D-00
T400	23224364	Transformer, Focus, TLN2168AH
T401	23224336	Transformer, Horiz. Drive, TLN1083
⚠T461	23236447	Transformer, Flyback, TFB4115AR
T461A	23236447	Anode SK14 800LD
T461B	23236447	Focus 20kV 550LD
T461C	23236447	Screen 590D 3kV
T801	23211703	Line Filter, TRF3196AQ
T802	23211670	Line filter, TRF3164G
T803	23211703	Line Filter, TRF3196AQ
T805	23211699	Line Filter, TRF33219AH
⚠T863	23217359	Transformer, Conv, TPW3374AG
⚠T864	23217399	Transformer, Conv, TPW33401AE

SEMICONDUCTORS

Q200	A6330059	Transistor, 2SC2482(C)
Q201	A6541130	Transistor, 2SA1162-Y
Q202	A6014040	Transistor, RN2404
Q203	A6004040	Transistor, RN1404
Q204	A6335470	Transistor, 2SC2712-Y
Q205	A6335470	Transistor, 2SC2712-Y
Q206	23318410	IC, M51494L
Q207	A6541130	Transistor, 2SA1162-Y
Q208	A6335470	Transistor, 2SC2712-Y
Q209	A6004040	Transistor, RN1404
Q211	A6335470	Transistor, 2SC2712-Y
Q270	A6004040	Transistor, RN1404
Q271	A6004040	Transistor, RN1404
Q272	A6014040	Transistor, RN2404
Q273	A6335470	Transistor, 2SC2712-Y
Q301	B0378560	IC, TA8427K
Q301B	70391355	Screw, BITTB3X8SZN
Q302	B0384625	IC, TA8859CP
Q370	A6534053	Transistor, 2SA1015-Y(TE
Q402	A678971D	Transistor, 2SC1569 FA-5
Q404	A6872801	Transistor, 2SD2253(FA)
Q404B	72471082	Screw, BRDT2W3X10 SZN
Q420	23314141	Transistor, 2SC3852
Q420B	70391355	Screw, BITTB3X8SZN
Q421	A6317440	Transistor, 2SC1815-Y
Q430	23314707	Transistor, 2SD1944,H
Q460	23314850	Transistor, 2SA1788-E
Q460B	72471082	Screw, BRDT2W3X10 SZN
Q461	A6317440	Transistor, 2SC1815-Y
Q462	A6317440	Transistor, 2SC1815-Y
Q501	B0101527	IC, TB1230N
Q502	A6335470	Transistor, 2SC2712-Y
Q503	A6335470	Transistor, 2SC2712-Y

Location No.	Part No.	Description
Q601	23318413	IC, LA4282
Q601B	70391356	Screw, BITTB3X10 SZN
Q602	23318413	IC, LA4282
Q602B	70391356	Screw, BITTB3X10 SZN
Q603	A6317440	Transistor, 2SC1815-Y
Q604	23906381	IC, LM1875T
Q604B	70391356	Screw, BITTB3X10 SZN
Q605	23906381	IC, LM1875T
Q605B	70391356	Screw, BITTB3X10 SZN
Q606	A6342206	Transistor, 2SC2878-A(TE
Q607	A6342206	Transistor, 2SC2878-A(TE
Q608	A6534053	Transistor, 2SA1015-Y(TE
Q609	A6534053	Transistor, 2SA1015-Y(TE
Q610	A6317440	Transistor, 2SC1815-Y
Q612	A6534053	Transistor, 2SA1015-Y(TE
Q681	A6342206	Transistor, 2SC2878-A(TE
Q682	A6342206	Transistor, 2SC2878-A(TE
Q683	A6342206	Transistor, 2SC2878-A(TE
Q684	A6342206	Transistor, 2SC2878-A(TE
Q705	A6317440	Transistor, 2SC1815-Y
Q706	A6317440	Transistor, 2SC1815-Y
Q707	A6734590	Transistor, 2SC752(G)TM-Y
Q709	A6317440	Transistor, 2SC1815-Y
Q710	A6534053	Transistor, 2SA1015-Y(TE
Q711	23314911	Transistor, 2SB1569A
Q712	23314914	Transistor, 2SD2400A
Q719	A6317440	Transistor, 2SC1815-Y
Q720	A6317440	Transistor, 2SC1815-Y
Q801	23905084	IC, STR-S6709
Q801B	72471082	Screw, BRDT2W3X10 SZN
Q802	23314141	Transistor, 2SC3852
Q803	23906414	IC, STR-F6654
Q803B	70391355	Screw, BITTB3X8SZN
Q804	A6317440	Transistor, 2SC1815-Y
Q805	A6317440	Transistor, 2SC1815-Y
⚠Q806	A8643108	Photo Coupler, TLP621(GR-LF
Q807	A6317440	Transistor, 2SC1815-Y
⚠Q826	A8643108	Photo Coupler, TLP621(GR-LF
Q831	23314141	Transistor, 2SC3852
Q831B	70391355	Screw, BITTB3X8SZN
Q833	23314141	Transistor, 2SC3852
Q833B	70391355	Screw, BITTB3X8SZN
Q835	23314141	Transistor, 2SC3852
Q840	23318299	IC, L78MR05
Q840B	70391355	Screw, BITTB3X8SZN
Q885	A6534053	Transistor, 2SA1015-Y(TE
Q901	23314811	Transistor, 2SC5147
Q902	A6317440	Transistor, 2SC1815-Y
Q903	23314811	Transistor, 2SC5147
Q904	A6317440	Transistor, 2SC1815-Y
Q905	23314811	Transistor, 2SC5147
Q906	A6317440	Transistor, 2SC1815-Y
Q907	A6509154	Transistor, 2SA562TM-Y(T)
Q908	A6321265	Transistor, 2SC2120-Y(TE)
Q910	A6317440	Transistor, 2SC1815-Y
Q911	A6317440	Transistor, 2SC1815-Y
Q912	A6534053	Transistor, 2SA1015-Y(TE
Q913	A6534053	Transistor, 2SA1015-Y(TE
Q914	A6317440	Transistor, 2SC1815-Y
QA01	23906394	IC, TMP87CS38N-3522
QA02	23904666	IC, NM24C08EN
QA03	A6534053	Transistor, 2SA1015-Y(TE
QA04	A6317440	Transistor, 2SC1815-Y
QA05	A6734590	Transistor, 2SC752(G)TM-Y

Location No.	Part No.	Description
QB01	A6317440	Transistor, 2SC1815-Y
QB03	A6002050	Transistor, RN1205
QB30	A6317440	Transistor, 2SC1815-Y
QB81	A6342206	Transistor, 2SC2878-A(TE
QB82	A6342206	Transistor, 2SC2878-A(TE
QB83	A6534053	Transistor, 2SA1015-Y(TE
QB92	A6317440	Transistor, 2SC1815-Y
QB93	A6534053	Transistor, 2SA1015-Y(TE
QB94	A6534053	Transistor, 2SA1015-Y(TE
QB95	A6534053	Transistor, 2SA1015-Y(TE
QB96	A6534053	Transistor, 2SA1015-Y(TE
QD01	23906068	IC, ZR38600PQC
QD02	23906069	IC, AK4309AVM-E2
QD04	A6030620	IC, TC7S04F
QD05	A6030620	IC, TC7S04F
QD06	23906069	IC, AK4309AVM-E2
QD07	23906069	IC, AK4309AVM-E2
QD10	70119743	IC, PST523D
QD30	B0385647	IC, TA1217AN
QD80	23314141	Transistor, 2SC3852
QD89	A6335470	Transistor, 2SC2712-Y
QD103	23314314	Transistor, XN4501
QD201	23905560	IC, M62420SP
QF01	23906346	IC, SDA5273-2S
QF02	23314204	Transistor, 2SC2412K,Q
QF03	23314204	Transistor, 2SC2412K,Q
QF04	A6734590	Transistor, 2SC752(G)TM-Y
QF05	23314204	Transistor, 2SC2412K,Q
QF06	23314204	Transistor, 2SC2412K,Q
QF10	23905862	IC, UPC424400LA
QR01	B0487584	IC, TC74HC4052AP
QR04	A6541130	Transistor, 2SA1162-Y
QR05	A6541130	Transistor, 2SA1162-Y
QR06	A6541130	Transistor, 2SA1162-Y
QR10	A6734590	Transistor, 2SC752(G)TM-Y
QR11	A6335470	Transistor, 2SC2712-Y
QR15	A6335470	Transistor, 2SC2712-Y
QR17	A6335470	Transistor, 2SC2712-Y
QR21	A6335470	Transistor, 2SC2712-Y
QR22	23114528	Transistor, 2SC1740S-Q
QS01	A6359870	Transistor, 2SC3326-B
QS02	A6359870	Transistor, 2SC3326-B
QS03	A6335470	Transistor, 2SC2712-Y
QS04	A6335470	Transistor, 2SC2712-Y
QS05	A6359870	Transistor, 2SC3326-B
QS06	A6359870	Transistor, 2SC3326-B
QS07	A6014040	Transostor, RN2404
QS08	A6359870	Transistor, 2SC3326-B
QS09	A6359870	Transistor, 2SC3326-B
QV01	B0385650	IC, TA1218N
QV02	A6335470	Transistor, 2SC2712-Y
QV02	A6317440	Transistor, 2SC1815-Y
QV06	A6541130	Transistor, 2SA1162-Y
QV09	23114528	Transistor, 2SC1740S-Q
QV10	A6335470	Transistor, 2SC2712-Y
QV12	23114528	Transistor, 2SC1740S-Q
QV14	23114528	Transistor, 2SC1740S-Q
QV20	A6335470	Transistor, 2SC2712-Y
QV21	A6004040	Transistor, RN1404
QZ01	B0410688	IC, TC9090AN
QZ02	A6335470	Transistor, 2SC2712-Y
QZ03	A6335470	Transistor, 2SC2712-Y
QZ04	A6335470	Transistor, 2SC2712-Y
QZ06	A6335470	Transistor, 2SC2712-Y

Location No.	Part No.	Description
D101	23316411	Diode, 1SS184
D201	23316687	Diode, Zener, MTZJ9.1B
D202	23316687	Diode, Zener, MTZJ9.1B
D203	23316687	Diode, Zener, MTZJ9.1B
D204	23118859	Diode, 1SS133
D206	23118859	Diode, 1SS133
D230	23118859	Diode, 1SS133
D240	23115599	Diode, 1N4148
D301	23118095	Diode, ERB44-06
D302	23118479	Diode, BYD33J
D306	23115599	Diode, 1N4148
D308	23118822	Diode, ERB12-02
D309	23118822	Diode, ERB12-02
D370	23316652	Diode, Zener, MTZJ2.7A
D371	23115599	Diode, 1N4148
D401	23316685	Diode, Zener, MTZJ8.2C
D403	23316667	Diode, Zener, MTZJ4.7C
D404	23118859	Diode, 1SS133
D406	23118479	Diode, BYD33J
D421	23316680	Diode, Zener, MTZJ7.5A
D422	23316726	Diode, Zener, MTZJ15C
D431	23316671	Diode, Zener, MTZJ5.6A
D432	23316671	Diode, Zener, MTZJ5.6A
D436	23115599	Diode, 1N4148
D441	23316687	Diode, Zener, MTZJ9.1B
D460	23118479	Diode, BYD33J
D461	23316582	Diode, ERC20-06
D461B	70391355	Screw, BITTB3X8SZN
D463	23115599	Diode, 1N4148
D464	23316718	Diode, Zener, MTZJ12A
D466	23316672	Diode, Zener, MTZJ5.6B
D467	23118479	Diode, BYD33J
D468	23316718	Diode, Zener, MTZJ12A
D488	23115599	Diode, 1N4148
D490	23316817	Diode, 1SS120-7
D601	23115599	Diode, 1N4148
D602	23115599	Diode, 1N4148
D603	23115599	Diode, 1N4148
D604	23115599	Diode, 1N4148
D610	23115599	Diode, 1N4148
D611	23115599	Diode, 1N4148
D612	23115599	Diode, 1N4148
D613	23115599	Diode, 1N4148
D614	23115599	Diode, 1N4148
D615	23115599	Diode, 1N4148
D616	23115599	Diode, 1N4148
D617	23115599	Diode, 1N4148
D618	23115599	Diode, 1N4148
D619	23115599	Diode, 1N4148
D624	23115599	Diode, 1N4148
D625	23115599	Diode, 1N4148
D626	23115599	Diode, 1N4148
D627	23115599	Diode, 1N4148
D628	23115599	Diode, 1N4148
D629	23115599	Diode, 1N4148
D630	23115599	Diode, 1N4148
D634	23115599	Diode, 1N4148
D635	23115599	Diode, 1N4148
D636	23115599	Diode, 1N4148
D704	23115599	Diode, 1N4148
D705	23115599	Diode, 1N4148
D715	23115599	Diode, 1N4148
D720	23115599	Diode, 1N4148
D721	23115599	Diode, 1N4148

Location No.	Part No.	Description
D801	23316795	Diode, D6SB60L, F05
D803	23118479	Diode, BYD33J
D804	23316678	Diode, Zener, MTZJ6.8B
D805	23115599	Diode, 1N4148
D806	23118479	Diode, BYD33J
D808	23118479	Diode, BYD33J
D809	23316672	Diode, Zener, MTZJ5.6B
D810	23115599	Diode, 1N4148
D811	23115599	Diode, 1N4148
D812	23118451	Diode, RU-4A
D815	23316725	Diode, Zener, MTZJ15B
D828	23115599	Diode, 1N4148
D832	23316672	Diode, Zener, MTZJ5.6B
D833	23115599	Diode, 1N4148
D834	23115599	Diode, 1N4148
D835	23115599	Diode, 1N4148
D837	23115599	Diode, 1N4148
D839	23316672	Diode, Zener, MTZJ5.6B
D840	23316391	Diode, D3SB60, 4109
D841	23115599	Diode, 1N4148
D842	23118338	Diode, RU4AM
D843	23316476	Diode, FML-G14S
D843B	70391355	Screw, BITTB3X8SZN
D844	23118052	Diode, RU4Z
D845	23118479	Diode, BYD33J
D846	23118479	Diode, BYD33J
D871	23118479	Diode, BYD33J
D883	23316406	Diode, FML-G16S
D883B	70391355	Screw, BITTB3X8SZN
D886	23115599	Diode, 1N4148
D890	23115599	Diode, 1N4148
D891	23118052	Diode, RU4Z
D892	23316673	Diode, Zener, MTZJ5.6C
D892	23118052	Diode, RU4Z
D894	23316381	Diode, RU1P
D895	23316673	Diode, Zener, MTZJ5.6C
D896	23118479	Diode, BYD33J
D897	23316678	Diode, Zener, MTZJ6.8B
D898	23316782	Diode, Zener, MTZJ6.2C
D899	23316782	Diode, Zener, MTZJ6.2C
D901	23115599	Diode, 1N4148
D903	23115599	Diode, 1N4148
D904	23115599	Diode, 1N4148
D905	23115599	Diode, 1N4148
D906	23115599	Diode, 1N4148
D907	23115599	Diode, 1N4148
D908	23115599	Diode, 1N4148
D909	23115599	Diode, 1N4148
D910	23115599	Diode, 1N4148
D911	23118479	Diode, BYD33J
DA01	23115599	Diode, 1N4148
DA02	23115599	Diode, 1N4148
DA03	23115599	Diode, 1N4148
DA42	23115599	Diode, 1N4148
DB01	23358505	Diode (LED), SLR56VC196F
DB02	23358503	Diode (LED), SCL003MC3FX
DB30	23115599	Diode, 1N4148
DD81	23316661	Diode, Zener, MTZJ3.9B
DF01	23316654	Diode, Zener, MTZJ3.0A
DF02	23115599	Diode, 1N4148
DR02	23316557	Diode, HSM221C
DR03	23118351	Diode, Zener, RD4.7M-T1BB2
DR04	23118859	Diode, 1SS133
DR05	23118859	Diode, 1SS133
DR06	23118859	Diode, 1SS133
DR07	23118859	Diode, 1SS133
DV01	23118296	Diode, Zener, RD9.1M-T1BB2
DV02	23118296	Diode, Zener, RD9.1M-T1BB2
DV03	23118296	Diode, Zener, RD9.1M-T1BB2
DV04	23118296	Diode, Zener, RD9.1M-T1BB2
DV05	23118296	Diode, Zener, RD9.1M-T1BB2
DV06	23118296	Diode, Zener, RD9.1M-T1BB2
DV07	23118296	Diode, Zener, RD9.1M-T1BB2
DV10	23316557	Diode, HSM221C
DV11	23316557	Diode, HSM221C
DV12	23118296	Diode, Zener, RD9.1M-T1BB2
DV14	23118296	Diode, Zener, RD9.1M-T1BB2
DZ01	23118293	Diode, Zener, RD10MB2

MISCELLANEOUS

B202	23470537	Frame, Terminal
B221	23037312	Screw, BTBW3X12 SZN
B223	23035412	Screw, BTB4X12 SZN
B224	23037312	Screw, BTBW3X12 SZN
BB03	23903022	Socket, 8P 2.5
BB04	23903022	Socket, 8P 2.5
BB05A	23368627	Plug, 8P 2.5
BB10	23903022	Socket, 8P 2.5
BB10A	23368627	Plug, 8P 2.5
BB11	23903022	Socket, 8P 2.5
BB11A	23368627	Plug, 8P 2.5
BB12	23903022	Socket, 8P 2.5
BB12A	23368627	Plug, 8P 2.5
BB13	23903022	Socket, 8P 2.5
BB13A	23368627	Plug, 8P 2.5
BB14	23903022	Socket, 8P 2.5
BB14A	23368627	Plug, 8P 2.5
BB15	23903022	Socket, 8P 2.5
BB15A	23368627	Plug, 8P 2.5
BB50B	23903022	Socket, 8P 2.5
BB51B	23903022	Socket, 8P 2.5
BB52B	23903022	Socket, 8P 2.5
BB53B	23903022	Socket, 8P 2.5
BB54A	23903022	Socket, 8P 2.5
BB54B	23903022	Socket, 8P 2.5
⚠F470	23144503	Fuse, 250V 1.25A
F470A	23165433	Holder, Fuse
F470B	23165433	Holder, Fuse
⚠F801	23144508	Fuse, 4.0A
F801A	23165433	Holder, Fuse
⚠F802	23144506	Fuse, 250V, 2.5A
F802A	23165433	Holder, Fuse
⚠F803	23144506	Fuse, 250V, 2.5A
F803A	23165433	Holder, Fuse
G101	24366273	CF, 27k ohm
G299	24366103	CF, 10k ohm
G311	24366392	CF, 3900 ohm
G430	23289100	Coil, Peaking, TRF4100AF
G430	23115599	Diode, 1N4148
G431	23289100	Coil, Peaking, TRF4100AF
G465	23316648	Diode, Zener, MTZJ2.2A
G492	23115599	Diode, 1N4148
G602	23103859	Coil (Ferrite Bead), TEM2011
G604	23103859	Coil (Ferrite Bead), TEM2011
G605	23103859	Coil (Ferrite Bead), TEM2011
G607	23103859	Coil (Ferrite Bead), TEM2011
G879	24366472	CF, 4700 ohm
G980	24005010	MF, 10M ohm, 1/2W

Location No.	Part No.	Description
GC15	23103940	Coil (Ferrite Bead), TEM2001
GC16	23103940	Coil (Ferrite Bead), TEM2001
GJ04	24000824	Chip, Jumper, 2125 type
GJ05	24000824	Chip, Jumper, 2125 type
GJ06	24000824	Chip, Jumper, 2125 type
GJ06	24000824	Chip, Jumper, 2125 type
GJ07	24000824	Chip, Jumper, 2125 type
GJ08	24000824	Chip, Jumper, 2125 type
GJ09	24000824	Chip, Jumper, 2125 type
GJ11	24000824	Chip, Jumper, 2125 type
GJ25	24000824	Chip, Jumper, 2125 type
GJ26	24000824	Chip, Jumper, 2125 type
GJ26	24000824	Chip, Jumper, 2125 type
GJ27	24000824	Chip, Jumper, 2125 type
GJ27	24000824	Chip, Jumper, 2125 type
GJ28	24000824	Chip, Jumper, 2125 type
GJ28	24000824	Chip, Jumper, 2125 type
GJ30	24000824	Chip, Jumper, 2125 type
GJ30	24000824	Chip, Jumper, 2125 type
GJ31	24000824	Chip, Jumper, 2125 type
GS01	24000824	Chip, Jumper, 2125 type
GV05	23103832	Chip Bead, TEM2125
GV07	24000824	Chip, Jumper, 2125 type
GV08	24000824	Chip, Jumper, 2125 type
GV11	24000824	Chip, Jumper, 2125 type
GV12	24000824	Chip, Jumper, 2125 type
GV13	24872681	Chip, 680 ohm, 1/16W
GV14	24000824	Chip, Jumper, 2125 type
GV15	24000824	Chip, Jumper, 2125 type
GV17	24000824	Chip, Jumper, 2125 type
GV38	24872220	Chip, 22 ohm, 1/16W
GV39	24872220	Chip, 22 ohm, 1/16W
GV40	24872220	Chip, 22 ohm, 1/16W
GV41	24872102	Chip, 1k ohm, 1/16W
H002	23148312	Module, IF UK MPX APRO MVGS48A
KB01	23904946	Remote Sensor, RPM-676CBR-S
P004	23161702	Terminal, 8P
P501A	23903025	Socket, 25P
P502A	23903025	Socket, 25P
P507	23902655	Socket, B-B, 15P
P512	23902863	Socket, 20P 2MM
P513	23902863	Socket, 20P 2MM
P661	23363607	Headphone Jack, 3.5mm
P801	23372012	Power Cord
PD01A	23902742	Socket, 7P, 2.5mm
PD02A	23902746	Socket, 13P, 2.5mm
PD04	23364092	Pin Jack
PD05	A5812240	HIC Optic Receiver, TORX176
PD30	23368511	Plug, 7P, 2.5mm
PD31	23367722	Plug, 13P, 2.5mm
PF01A	23367724	Connector, B-B, 15P
PH01	23902604	Socket, 21P
PH02	23902604	Socket, 21P
PH03	23902604	Socket, 21P
PU01	23368634	Plug, 25P 1.5MM
PU02	23368634	Plug, 25P 1.5MM
PV03	23365515	Jack, SVHS
PV04	23363252	Pin Jack, Yellow
PV05	23365508	Jack, Phono
PV10B	23368520	Plig, 20P 2MM
PV11B	23368520	Plig, 20P 2MM
S601	23145355	Switch, Slide, 4C-2P

Location No.	Part No.	Description
⚠S801	23344416	Switch, Power
SA01	23145430	Switch, Push, 1C1P
SA02	23145430	Switch, Push, 1C1P
SA03	23145430	Switch, Push, 1C1P
SA04	23145430	Switch, Push, 1C1P
SA06	23145430	Switch, Push, 1C1P
SR82	23146564	Relay, DC12V
⚠V901A	23902824	Socket, CRT, 10P
W661	23351138	Speaker, SPK-1396, 80x120
W662	23351138	Speaker, SPK-1396, 80x120
W663	23351138	Speaker, SPK-1396, 80x120
W664	23351138	Speaker, SPK-1396, 80x120
W665	23351139	Speaker, SPK-1397, 120x120
W666	23351141	Speaker, SPK-1398, 80x120
W667	23351141	Speaker, SPK-1398, 80x120
W668	23351142	Speaker, SPK-1399, 50x50
W669	23351142	Speaker, SPK-1399, 50x50
X501	23153438	Crystal, 16.2
XA01	23153325	Ceramic Resonator, 8.00M, TCR1056
XF01	23153421	Crystal, 20.48MHz
⚠Z420	23144539	Protector, PRF20005491, 125V, 2A
⚠Z430	23144536	Protector, 125V, 1A
Z801	23904998	IC, HIC1016
⚠Z890	23144543	Protector, 125V, 5A
⚠Z891	23144543	Protector, 125V, 5A
⚠Z892	23144543	Protector, 125V, 5A
⚠Z893	23144543	Protector, 125V, 5A
⚠Z894	23144543	Protector, 125V, 5A
⚠Z895	23144543	Protector, 125V, 5A
⚠Z896	23144543	Protector, 125V, 5A
Z897	23144539	Protector, 125V, 2A
⚠Z899	23144539	Protector, 125V, 2A
ZC01	23107626	Filter, TEM1022
ZD101	23153325	Ceramic Resonator, 8.00M, TCR1056
ZT01	23153736	Cermic Resonator, TCR1025

PC BOARD ASSEMBLIES

＊U101A	23781658	Dolby Board, PB7944X-1
＊U101B	23781659	Digital-IN Board, PB7944X-2
＊U102	23781635	Back Term Board, PB7934
＊U103	23781636	V/C/D Board, PB7935
＊U104A	23781643	TEXT Board, PB7928Y
＊U901	23781642	CRT Drive Board, PB8066X
＊U902A	23781637	Signal Board, PB7936X
＊U903	23781638	Power Board, PB7937X
＊U904	23781639	Def Board, PB7938X
＊U906A	23781640	Cont-1 Board, PB7939X-1
＊U906B	23781641	Cont-2 Board, PB7939X-2

PICTURE TUBE

⚠V901	23312763	Picture Tube, M90AHL50X52

TUNER

H001	23321300	Tuner, UF821BL

ACCESSORIES

K902	23306216	Remote Hand Unit, CT-9900
AT04	23305572	Battery Cover
Y101	23563302	Owner's Manual, English 3787DB

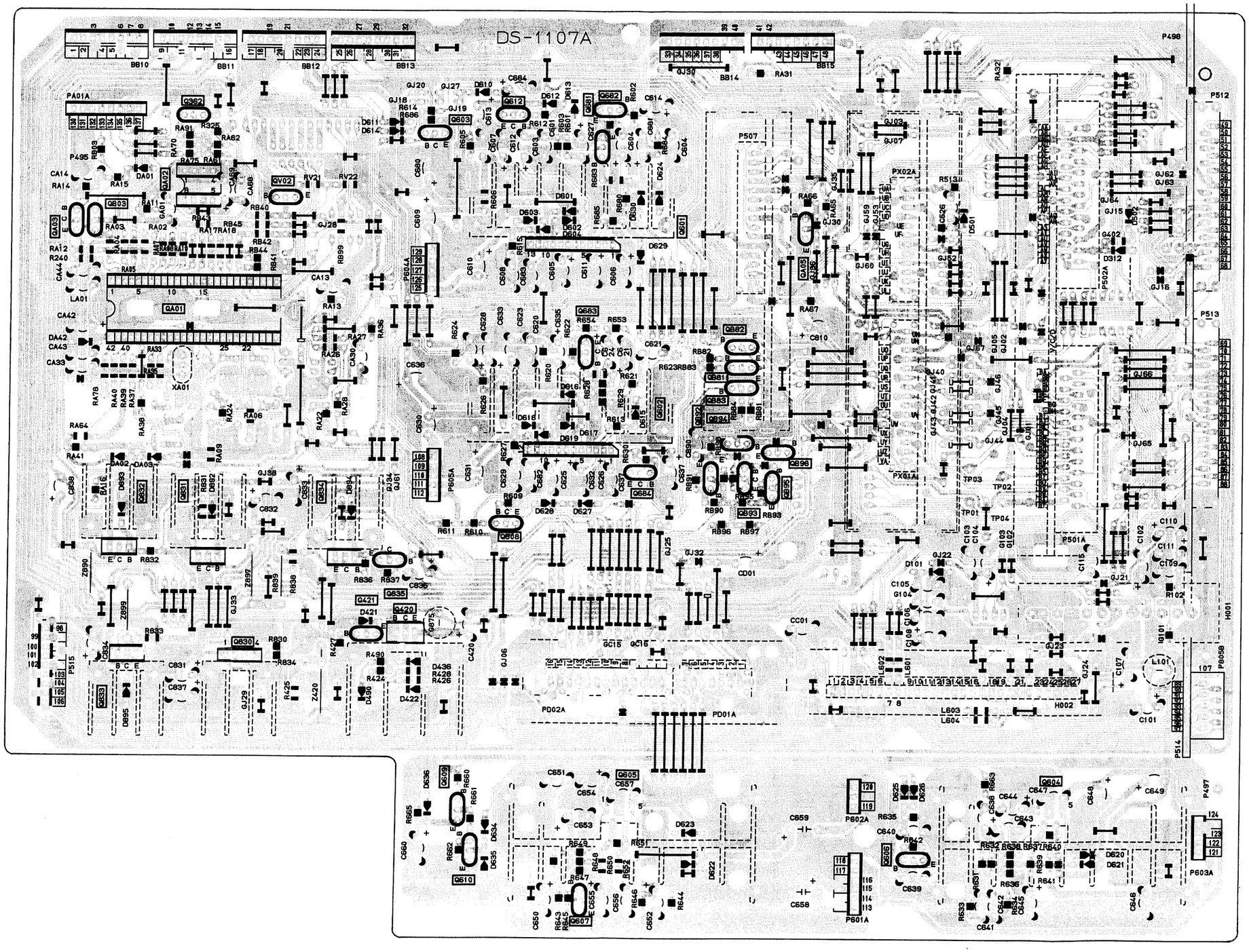
SPECIFIC INFORMATIONS

Location No.	Part No.	Description
CABINET PARTS		
A201S	23510423	Front Cover
A214	23035412	Screw. BTB4X12SZN
A215	23035412	Screw. BTB4X12SZN
A216	23035412	Screw. BTB4X12SZN
A223	23451972	CRT Support
A231	23445154	Button, Power
A233	23430441	Lens, Remote
A234	23430443	Piece, LED
A236	23519929	Speaker Grille, L/R
A238	23519930	Speaker Grille, Center
A239	23460951	Trim, Control
A241	70368125	Push Catch for Door
A242	23427378	Door, Right
A243	23427379	Door, Left
A245	23430453	Button, Key
A246	23427422	Piece, Control
A248	23460971	Trim, Key
⚠A401	23427423	Back Cover
A403	23796146	Woofer Box Assembly
A411	23560934	Label, Model No.
A420	23460952	Trim, Back Term
A701	23525570	Carton
A702	23935751	Packing, Bottom
A703	23935752	Packing, Top
A704	23525573	Tray
A706	23974753	PP Band
A710	23560935	Label, Carton

Location No.	Part No.	Description

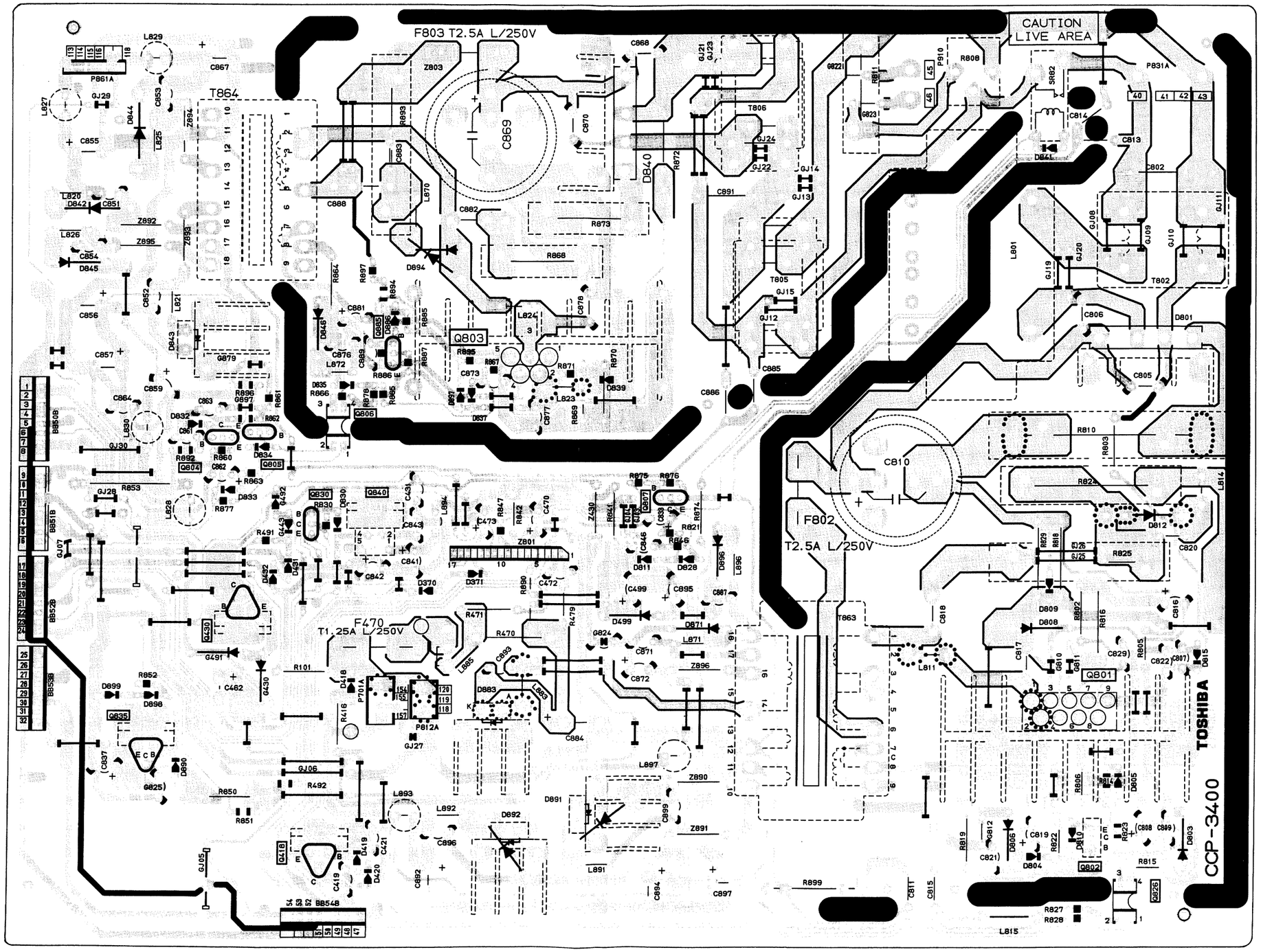
SIGNAL BOARD PB7936X

BOTTOM (FOIL) SIDE



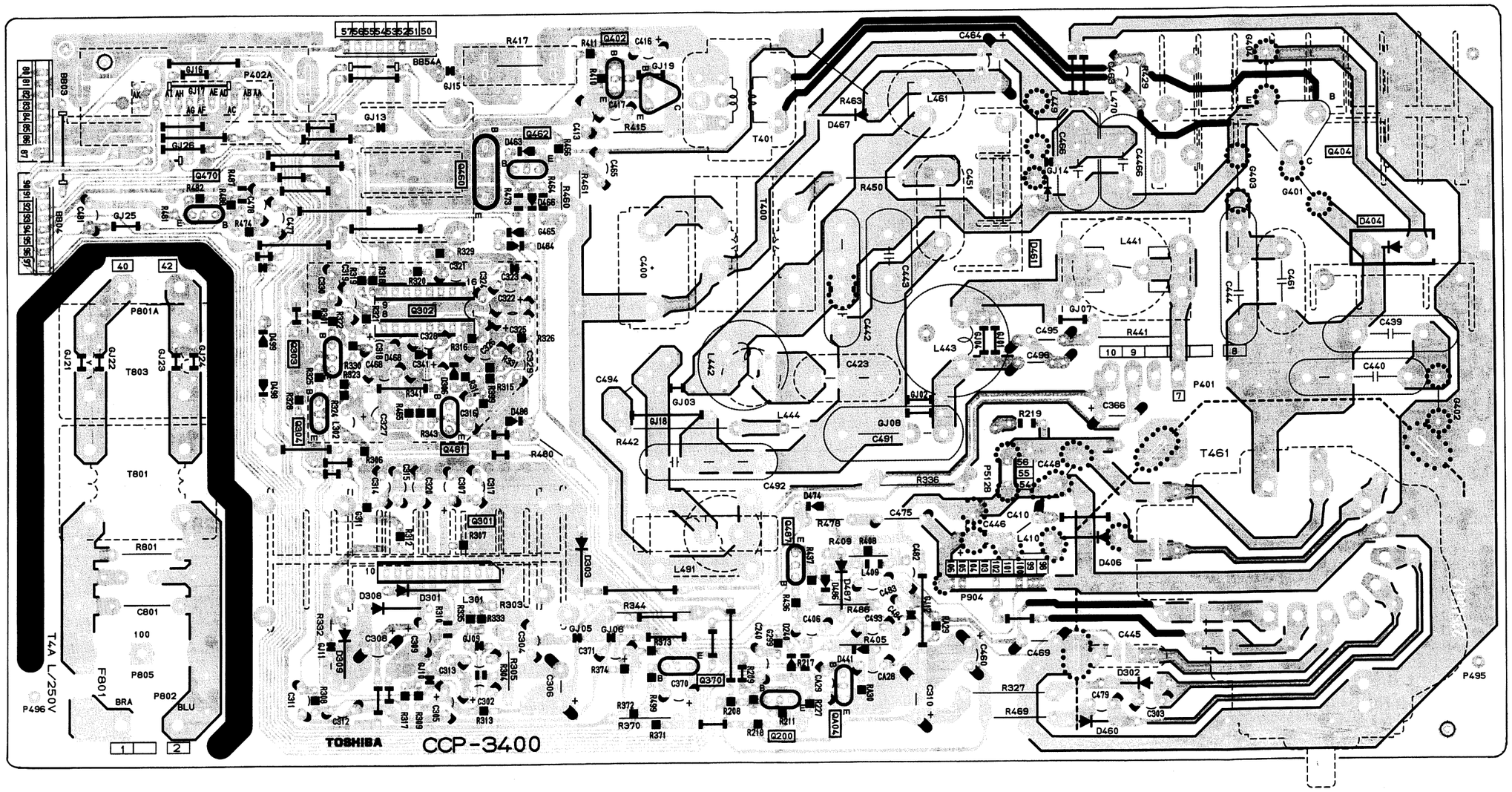
POWER BOARD PB7937X

BOTTOM (FOIL) SIDE



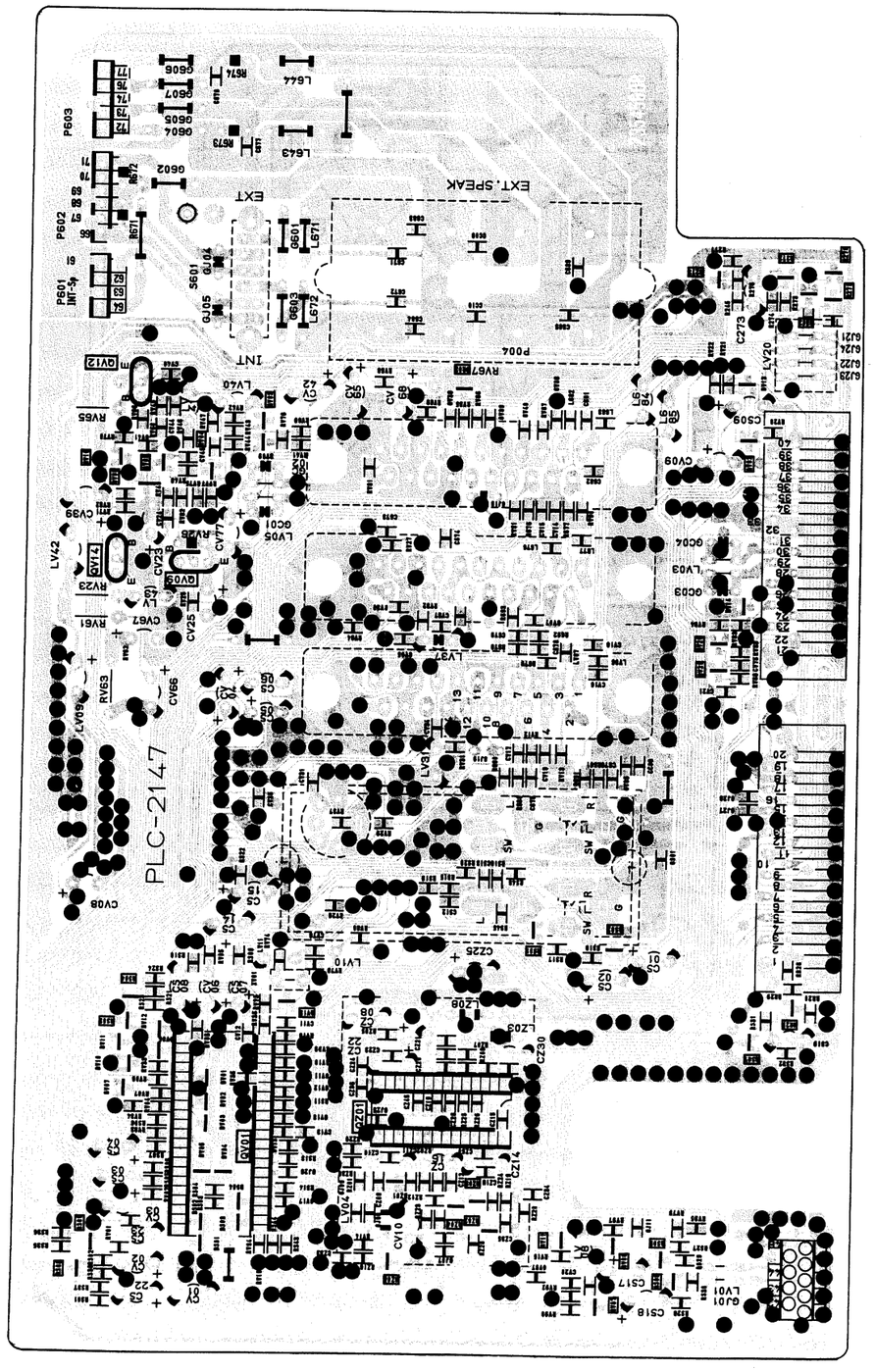
DEF BOARD PB7938X

BOTTOM (FOIL) SIDE



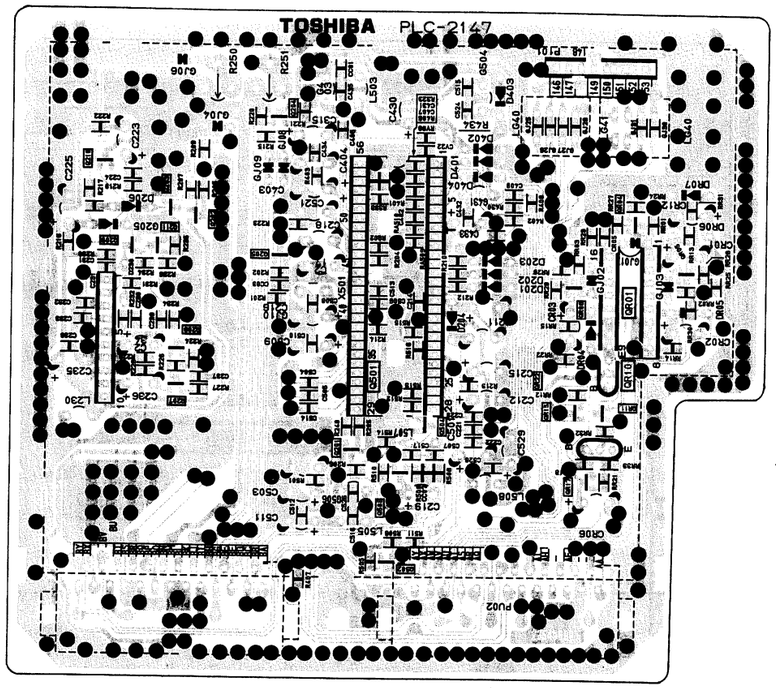
BACK TERM BOARD PB7934

BOTTOM (FOIL) SIDE



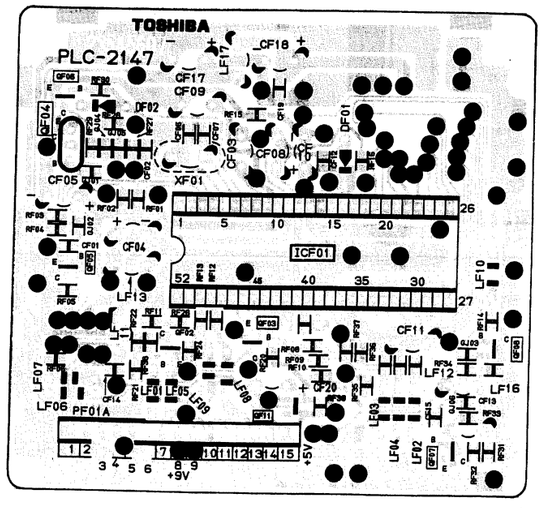
V/C/D BOARD PB7935

BOTTOM (FOIL) SIDE



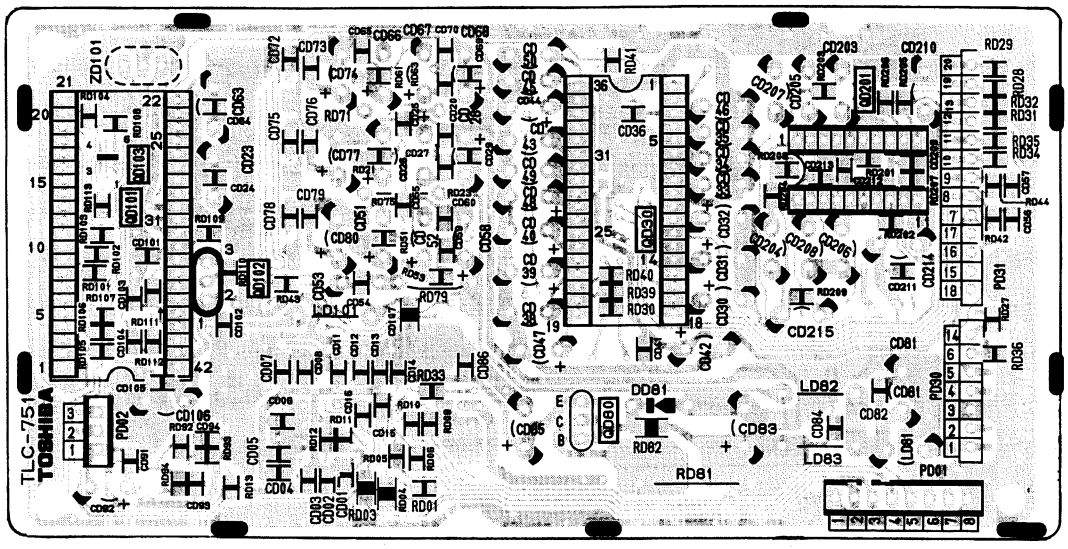
TEXT BOARD PB7928Y

BOTTOM (FOIL) SIDE



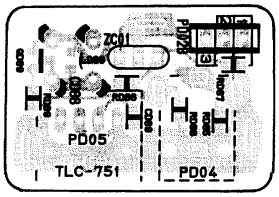
DOLBY BOARD PB7944-1

BOTTOM (FOIL) SIDE



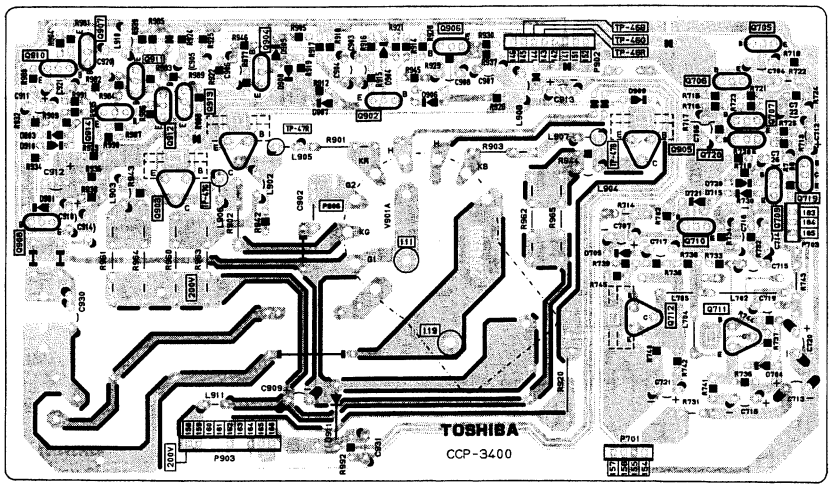
DIGITAL-IN BOARD PB7944-2

BOTTOM (FOIL) SIDE



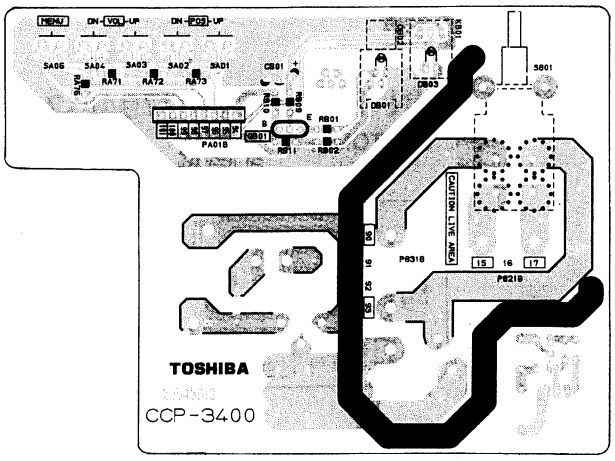
CRT DRIVE BOARD PB8066X

BOTTOM (FOIL) SIDE



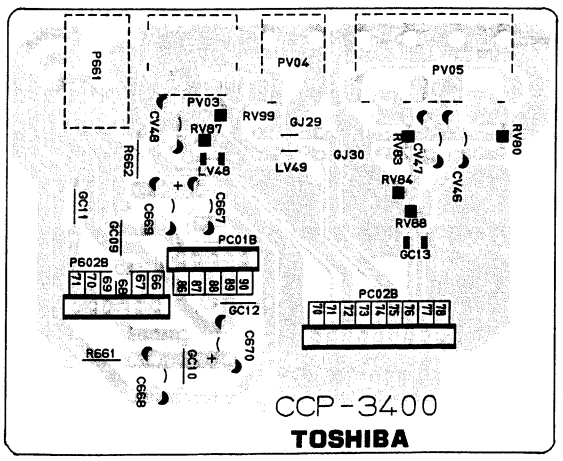
CONT-1 BOARD PB7939X-1

BOTTOM (FOIL) SIDE



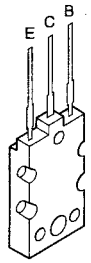
CONT-2 BOARD PB7939X-2

BOTTOM (FOIL) SIDE

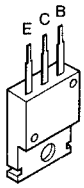


TERMINAL VIEW OF TRANSISTORS

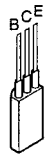
① 2SD2253
(old)
2SC5243



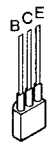
② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



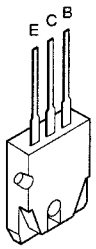
③ 2SC752GTM
2SC2482
2SC2655
2SC4721P



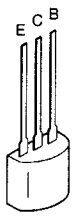
④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335



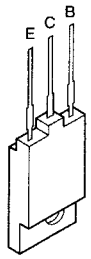
⑤ 2SA1788



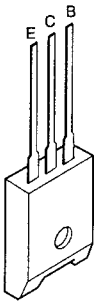
⑥ RN2203
RN2201
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201



⑦ 2SD1554
2SD2253
2SD1556
2SC5143



⑧ ON4409



SPECIFICATIONS

MEMO

SPECIFICATIONS

Input Power Rating:	210 W (Approx), AC 220~240 V, 50 Hz
Aerial Input Impedance:	75 ohm unbalanced type for UHF
Receiving Channels:	PAL I Standard: UHF ..... channels 21 to 69
Intermediate Frequencies:	Picture I-F carrier frequency ..... 38.9 MHz Sound I-F carrier frequency ..... 32.9 MHz Colour sub-carrier frequency ..... 34.47 MHz
Video Input:	PAL, PAL 60 Hz (Video disk playback) NTSC 3.58/4.43 MHz/50 Hz NTSC (VCR playback)
Picture Tube:	37 inches, M90AHL50X52, 900 mm (measured on diagonal of viewable picture area), 110° deflection
Sound Output:	15w + 15w (at 10% Distortion, Main) 15w (at 10% Distortion, Woofer) 25w (at 10% Distortion, Center) 15w + 15w (at 10% Distortion, Surround)
Speakers:	80 mm x 120 mm, oval, 2 pcs (Main) 120 mm, round, 1 pcs (Woofer) 80 mm x 120 mm, oval, 2 pcs (Center) 50 mm; round, 2 pcs (Tweeter)
Dimensions:	Height ..... 784.5 mm Width ..... 1006 mm Depth ..... 647 mm
Mass:	76.5 kg (Approx)

Specifications are subject to change without notice.

TOSHIBA

FILE NO. 033-9801
SUPPLEMENT

2485
1035041 ≠ 2417

SERVICE MANUAL

COLOUR TELEVISION

C8SS Chassis

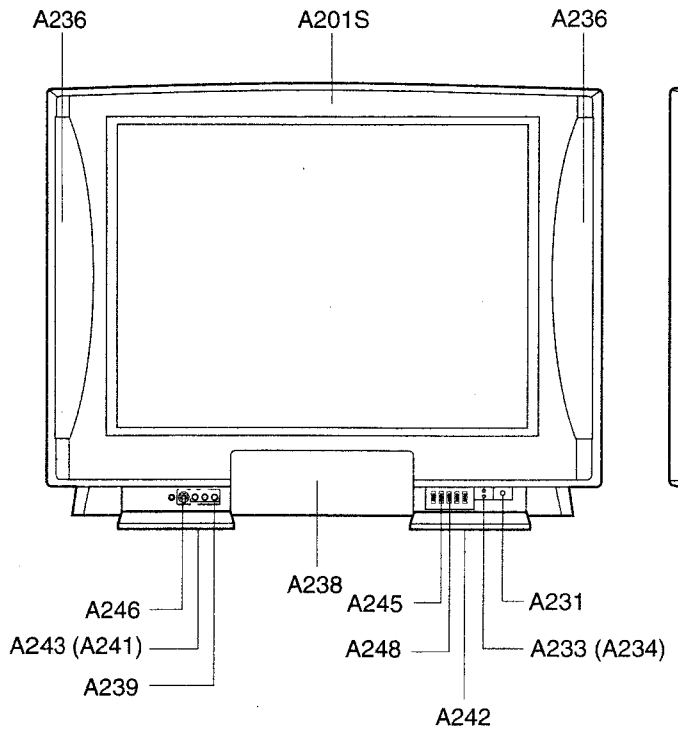
3787DB, 3788DG

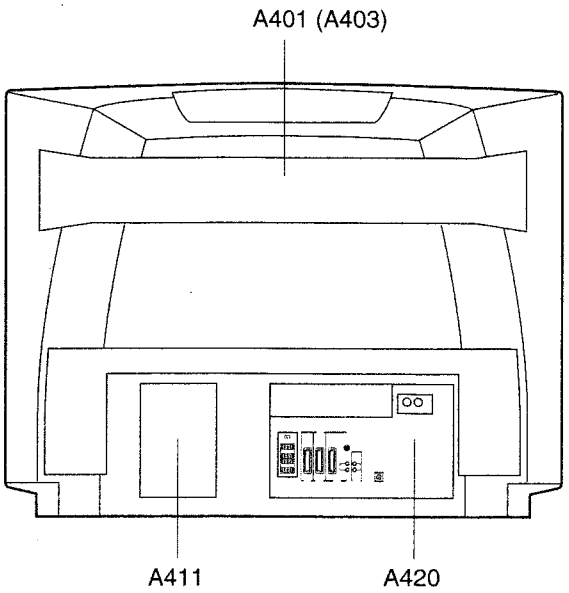
– SUMMARY –

This supplement covers revised version of cabinet replacement parts list for above model. Use this service manual together with the service manual of 3787DB (File No. 030-9801), 3788DG (File No. 030-9807).

PRINTED IN JAPAN Dec., 1998 (So)

CABINET REPLACEMENT PARTS LIST





3787DB

Location No.	Part No.	Description
CABINET PARTS		
A201S	23510423	Front Cover
A214	23035412	Screw. BTB4X12SZN
A215	23035412	Screw. BTB4X12SZN
A216	23035412	Screw. BTB4X12SZN
A223	23451972	CRT Support
A231	23445154	Button, Power
A233	23430441	Lens, Remote
A234	23430443	Piece, LED
A236	23519929	Speaker Grille, L/R
A238	23519930	Speaker Grille, Center
A239	23460951	Trim, Control
A241	70368125	Push Catch for Door
A242	23427378	Door, Right
A243	23427379	Door, Left
A245	23430453	Button, Key
A246	23427422	Piece, Control
A248	23460971	Trim, Key
⚠A401	23427423	Back Cover
A403	23796146	Woofer Box Assembly
A411	23560934	Label, Model No.
A420	23460952	Trim, Back Term
A701	23525570	Carton
A702	23935751	Packing, Bottom
A703	23935752	Packing, Top
A704	23525573	Tray
A706	23974753	PP Band
A710	23560935	Label, Carton

3788DG

Location No.	Part No.	Description
CABINET PARTS		
A201S	23510524	Front Cover
A214	23035412	Screw, BTB4X12 SZN
A215	23035412	Screw, BTB4X12 SZN
A216	23035412	Screw, BTB4X12 SZN
A231	23445154	Button, Power
A233	23430441	Lens, Remote
A234	23430443	Piece, LED
A236	23519929	Speaker Grille, L/R
A238	23519930	Speaker Grille, Center
A239	23460951	Trim, Control
A241	70368125	Push Catch for Door
A242	23427378	Door, Right
A243	23427512	Door, Left
A245	23430453	Button, Key
A246	23427422	Piece, Control
A248	23460971	Trim, Key
⚠A401	23427423	Back Cover
A403	23796146	Woofer Box Assembly
A411	23550037	Label, Model No.
A420	23460952	Trim, Back Term
A701	23525656	Carton
A702	23935751	Packing, Bottom
A703	23935752	Packing, Top
A704	23525573	Tray
A709	23845450	Joint
A710	23550038	Label, Carton

TOSHIBA CORPORATION

1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

SCHEMATIC DIAGRAM MODEL : 3787DB (1/5)

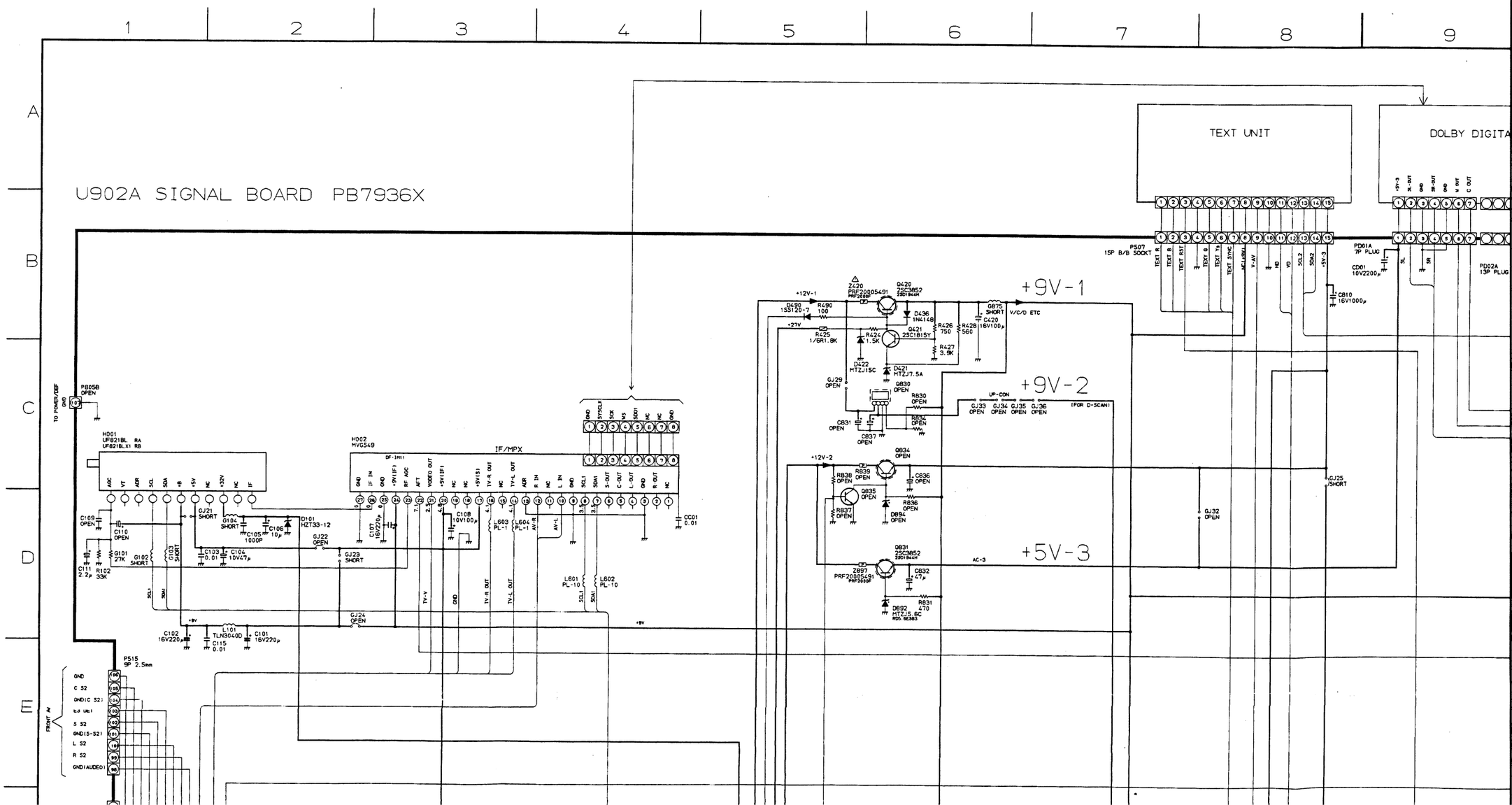
CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary ±20%.
2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
3. Waveforms are taken using a standard colour bar signal.
4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

NOTES:

1. D.C. resistance value of a principal transfo
   gram. These are measured for separated fro
2. The circuits are subject to change without n
3. ⬬ : Solder links.



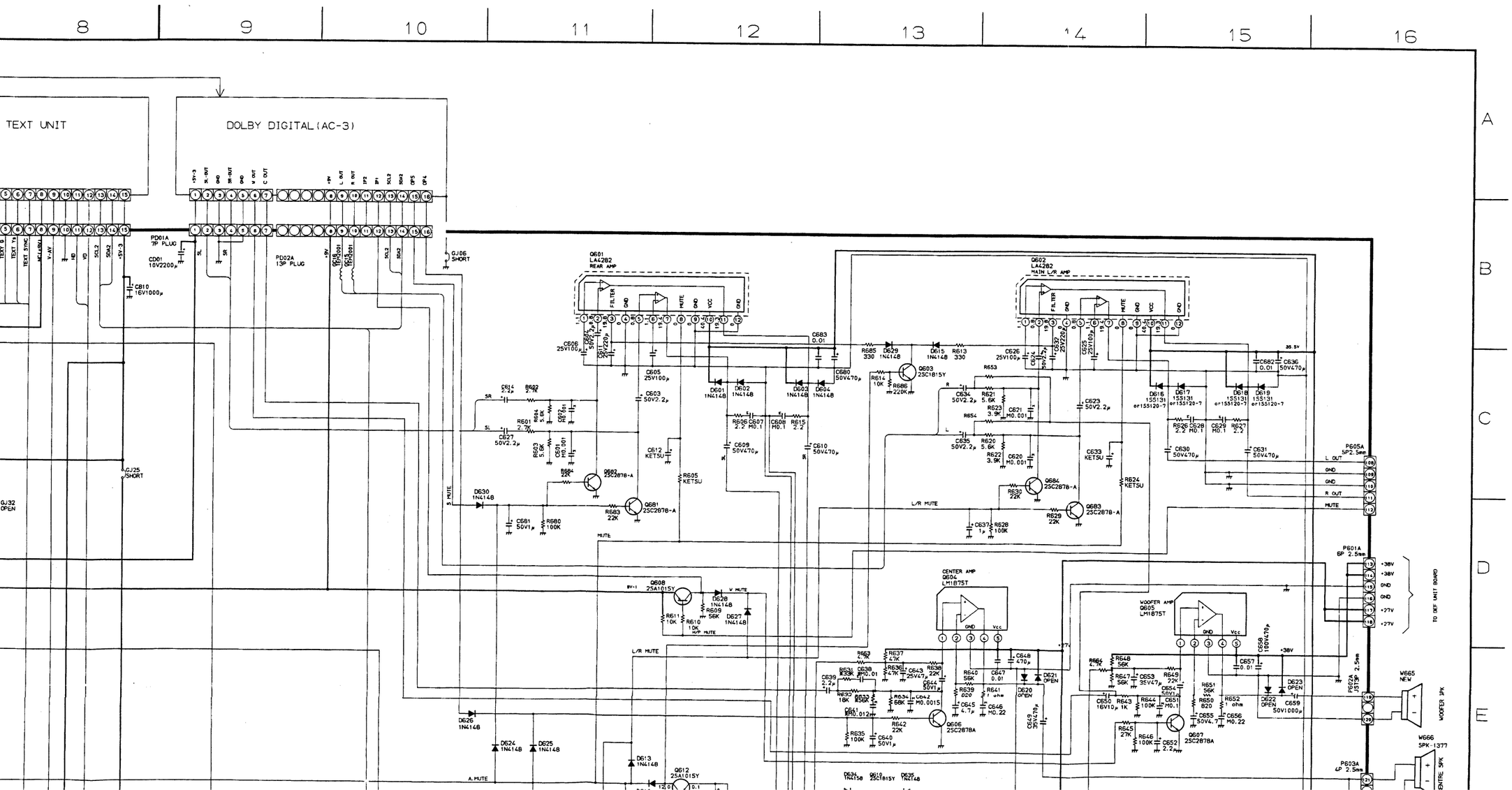
NOTES:

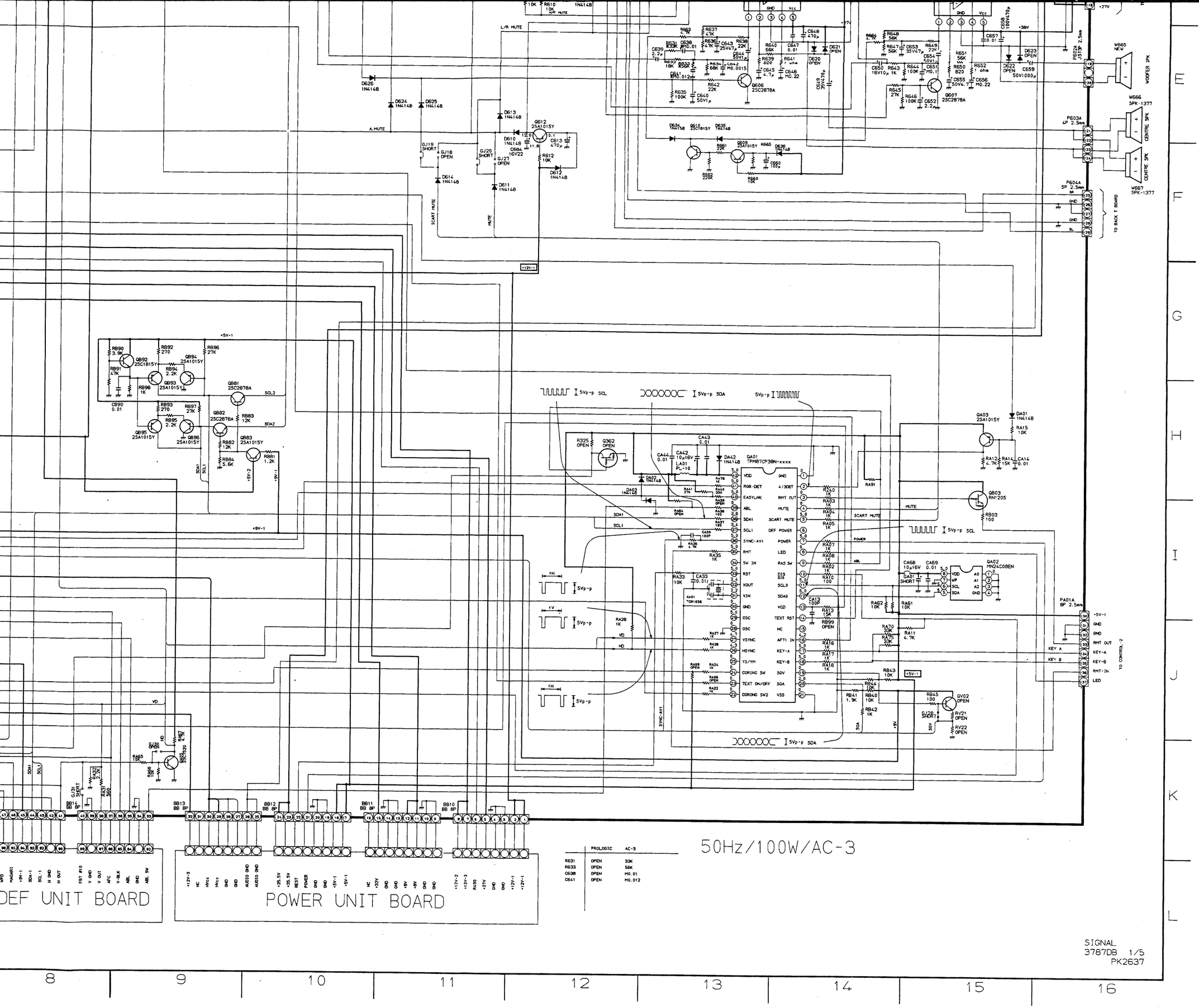
1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. ● : Solder links.

EXPRESSION

VALUE OF RESISTOR, CAPACITOR and INDUCTOR

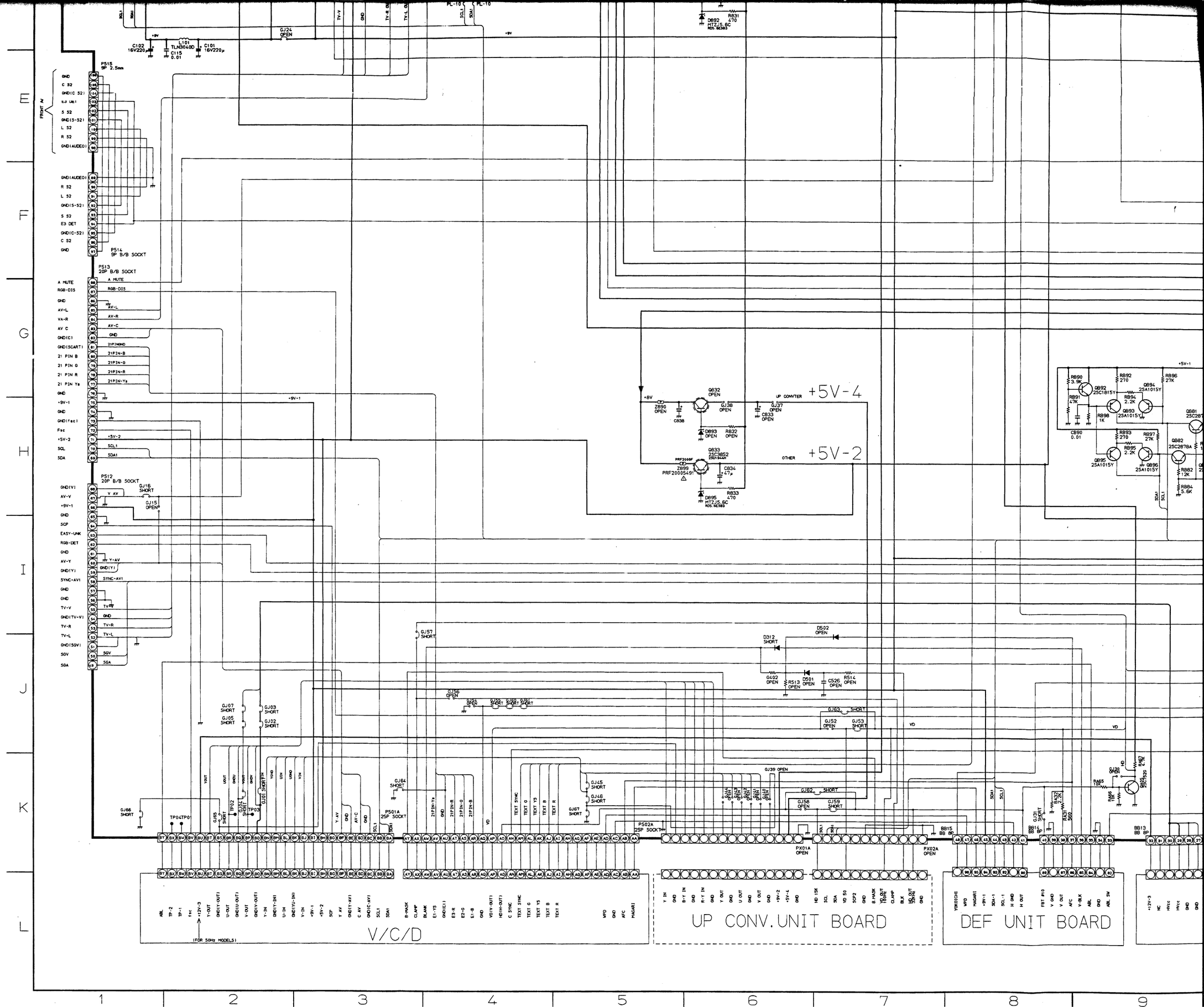
1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH, and the values less than 1 in H.





8 9 10 11 12 13 14 15 16

E F G H I J K L


P515 9P 2.5mm
GND
C S2
GND(C S2)
E3 DET
S S2
GND(S-S2)
L S2
R S2
GND(AUDEO)
FRONT AV
P514 9P B/B SOCKT
P513 20P B/B SOCKT
A MUTE
RGB-DIS
AV-L
AV-R
AV-C
21PINGND
21PIN-B
21PIN-G
21PIN-R
21PIN-Ys
+9V-1
+5V-2
SCL1
SDA1
P512 20P B/B SOCKT
V AV
Y-AV
SYNC-AV1
TV-V
TV-R
TV-L
SGV
SGA
GJ16 SHORT
GJ15 OPEN
GJ24 OPEN
C102 16V220μ
L101 TLN3040D
C115 0.01
C101 16V220μ
+8V
+5V-1
+5V-4
UP CONVERTER
+5V-2
OTHER
Z890 OPEN
C838
Q832 OPEN
GJ38 OPEN
GJ37 OPEN
C833 OPEN
D893 OPEN
R832 OPEN
Q833 2SC3852
PRF20005491
Z899 PRF20005491
C834 47μ
D895 MTZJ5.6C
R833 470
D892 MTZJ5.6C
R831 470
RB90 3.9K
RB92 270
RB96 27K
Q892 2SC1815Y
Q894 2SA1015Y
RB91 47K
RB94 2.2K
Q893 2SA1015Y
RB98 1K
CB90 0.01
RB93 270
RB97 27K
RB95 2.2K
Q895 2SA1015Y
Q896 2SA1015Y
Q882 2SC2878A
RB82 12K
RB84 5.6K
Q881 2SC2878
GJ57 SHORT
D312 SHORT
D502 OPEN
G402 OPEN
R513 OPEN
D501 OPEN
C526 OPEN
R514 OPEN
GJ56 OPEN
GJ55 OPEN
GJ54 SHORT
GJ51 SHORT
GJ50 SHORT
GJ07 SHORT
GJ05 SHORT
GJ03 SHORT
GJ02 SHORT
GJ63 SHORT
GJ52 OPEN
GJ53 SHORT
VD
GJ39 OPEN
GJ62 SHORT
GJ58 OPEN
GJ59 SHORT
GJ64 SHORT
GJ66 SHORT
GJ65 SHORT
GJ01 SHORT
GJ45 SHORT
GJ46 SHORT
GJ67 SHORT
TP04 TP01
TP02
TP03
P501A 25P SOCKT
P502A 25P SOCKT
PX01A OPEN
PX02A OPEN
BB15 BB BP
BB14 BB BP
BB13 BB BP
Q838 2SC1815Y
R865 10K
R866 10K
R867 2.7K
R431 2.2K
R430 560
SDA1
SCL1
V/C/D
(FOR 50Hz MODELS)
UP CONV.UNIT BOARD
DEF UNIT BOARD

SCHEMATIC DIAGRAM MODEL : 3787DB (2/5)

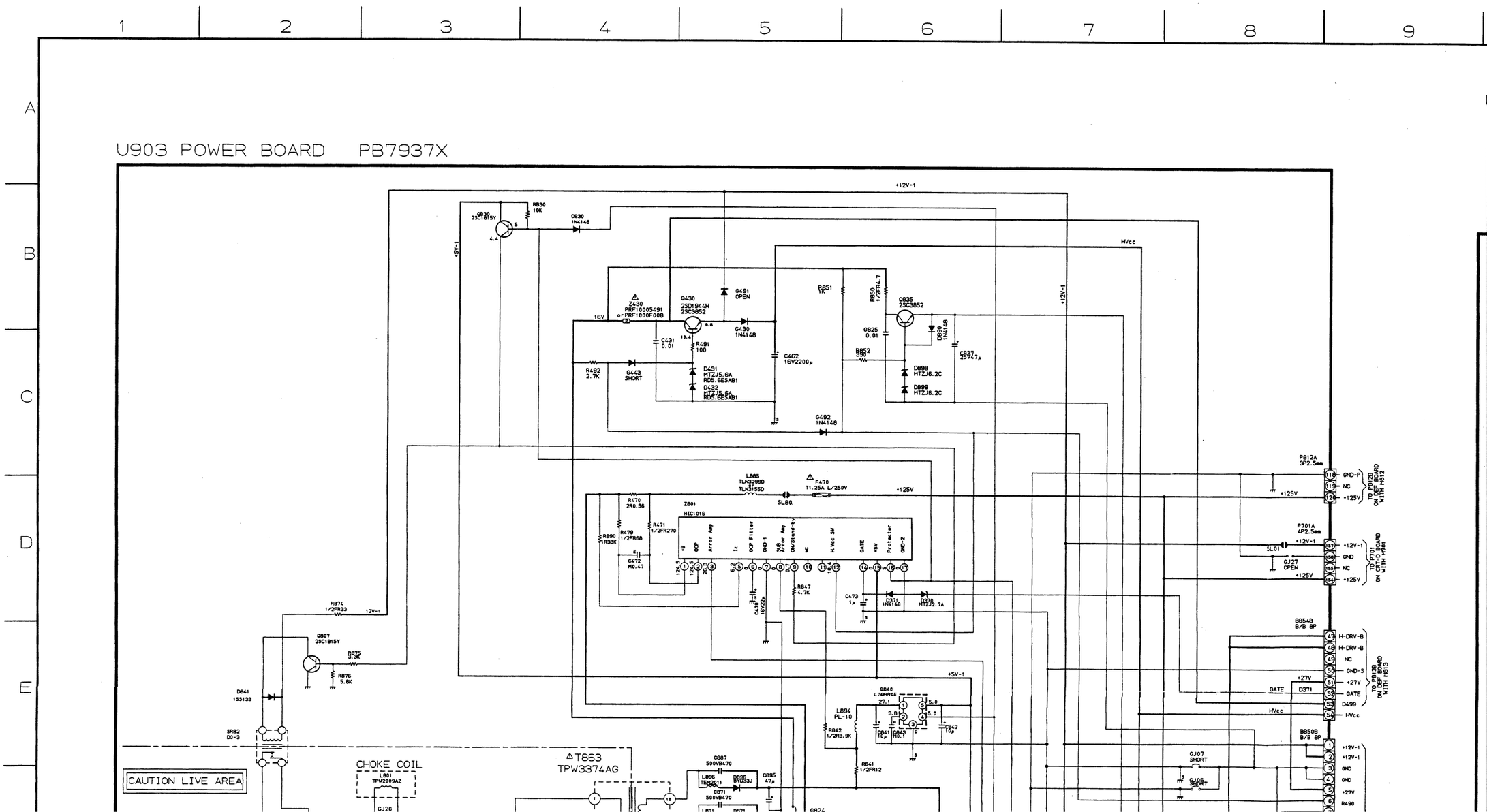
CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary ±20%.
2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
3. Waveforms are taken using a standard colour bar signal.
4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

NOTES:

1. D.C. resistance value of a principal transform
   gram. These are measured for separated from t
2. The circuits are subject to change without noti
3. ⬬ : Solder links.



NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
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3. ● : Solder links.

EXPRESSION

VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. Resistance is shown in ohm, k=1,000, M=1,000,000
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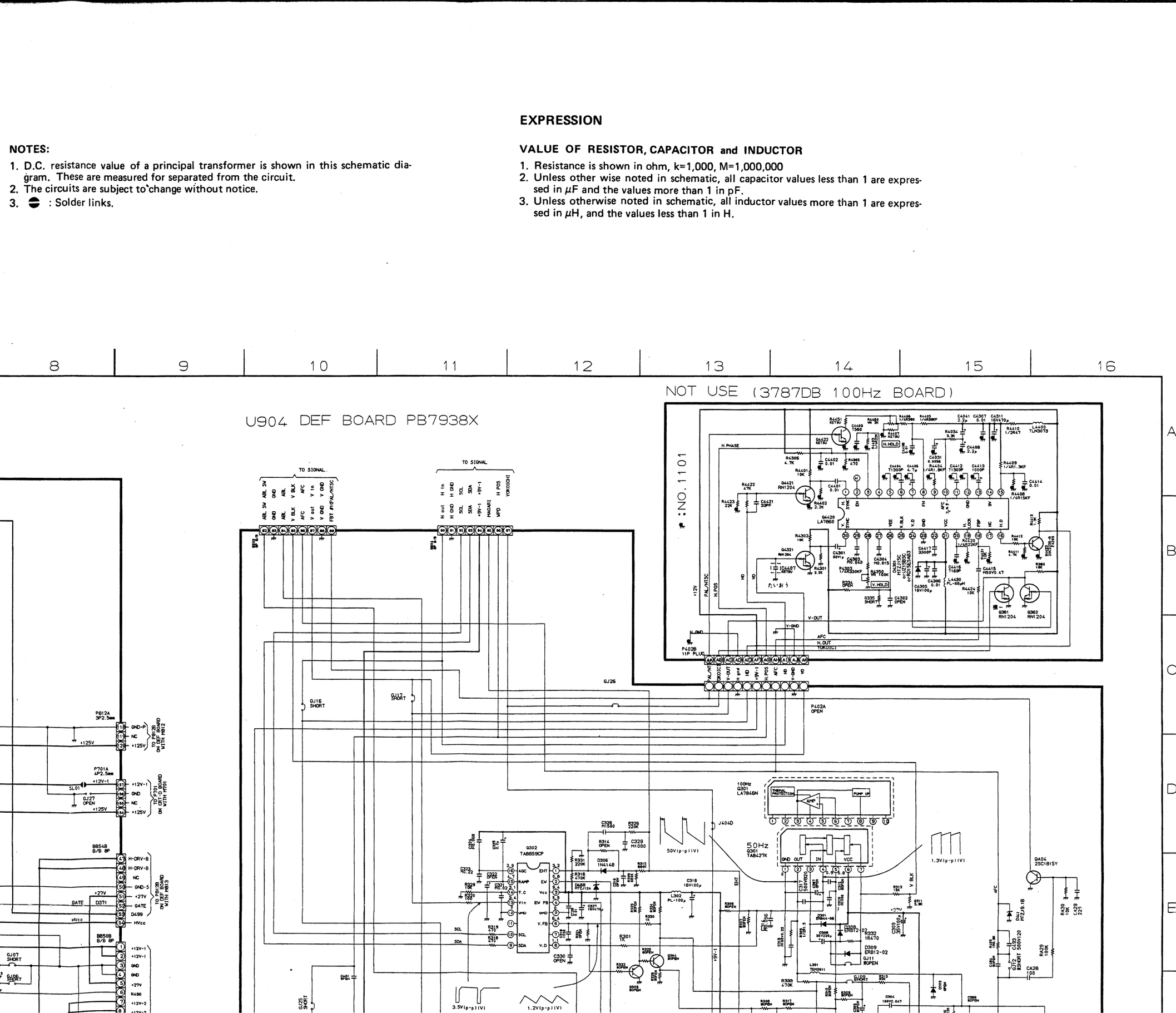
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH, and the values less than 1 in H.

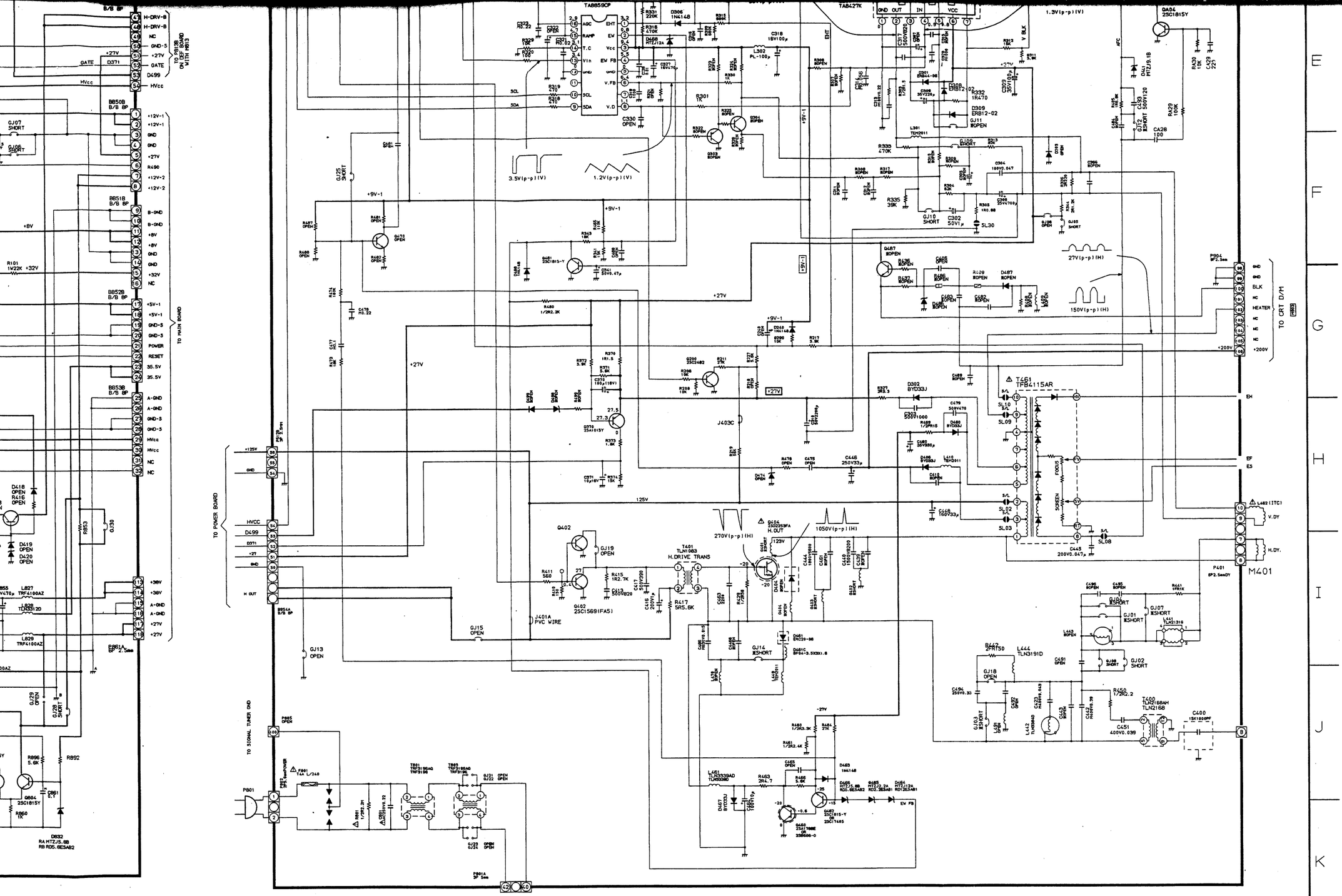
8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16

A | B | C | D | E

U904 DEF BOARD PB7938X

NOT USE (3787DB 100Hz BOARD)

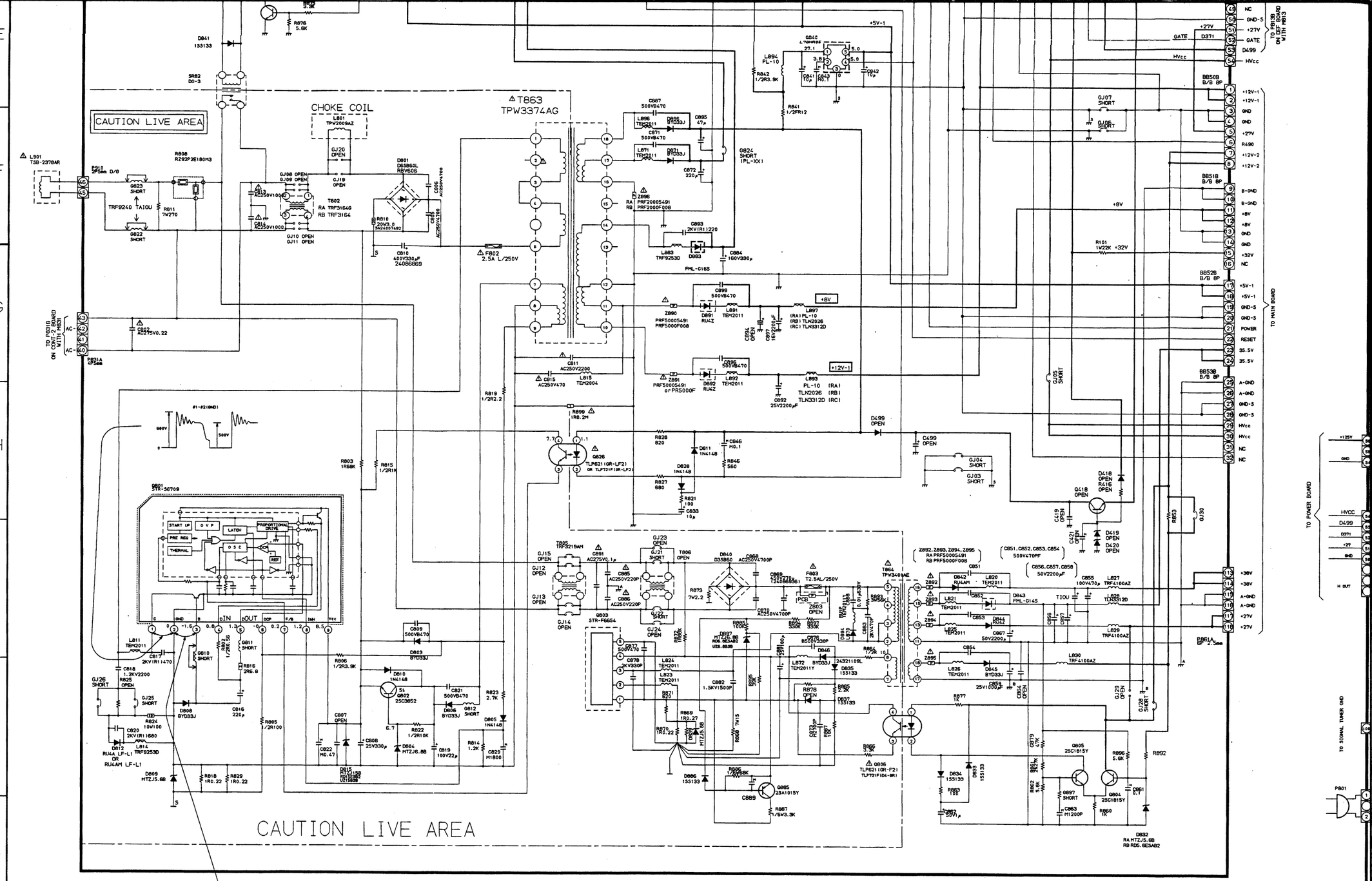




	3787DB	3387DB	2987DB
C492	OPEN	OPEN	250V0.27μF
R450	1/2R2.2	OPEN	OPEN
T400	TLN2168AH	OPEN	OPEN
L441	TLN2131G	TLN2157G	TLN2144BG
L442	TLN3384D	TLN3384D	TLN3010
L461	TLN3339AD	TLN3367D	TLN3061
L491	OPEN	OPEN	TLN3368D
GJ03	SHORT	SHORT	OPEN
F470	1.25A	1.0A	1.0A

NOTE
The marking [OPEN] means that there are on component on the PCB though there are the marking of part No. on the PCB. Its means open circuited.

POWER/DEF
3787DB 2/5
PK2638



	3787DB	3387DB	2987DB
C400	15K1000pF	OPEN	OPEN
C423	400V0.043μF	400V0.043μF	400V0.15μF
C440	1.5KV8200pF	1.5KV7500pF	1.5KV6600pF
C442 (RA)	400V0.39μF (ARUKO)	400V0.33μF (ARUKO)	250V0.56μF (ARUKO)
(RB)	315V0.39μF (SHINEI)	315V0.33μF (SHINEI)	250V0.56μF (TAITUU)
(RC)	315V0.39μF (TAITUU)	315V0.33μF (TAITUU)	——
C444	1.8KV5600pF	1.8KV6200pF	1.8KV7500pF
C451	400V0.039μF	OPEN	OPEN
C464	100V10μF (24640872E)	100V10μF (24640872E)	100V3.3μF (24676339S)
C491	SHORT	SHORT	250V1.5μF

	3787DB	3387DB	2987D
C492	OPEN	OPEN	250V0.2
R450	1/2R2.2	OPEN	OPEN
T400	TLN2168AH	OPEN	OPEN
L441	TLN2131G	TLN2157G	TLN214
L442	TLN3384D	TLN3384D	TLN301
L451	TLN3339AD	TLN3367D	TLN306
L491	OPEN	OPEN	TLN336
GJ03	SHORT	SHORT	OPEN
F470	1.25A	1.0A	1.0A

SCHEMATIC DIAGRAM MODEL : 3787DB (3/5)

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

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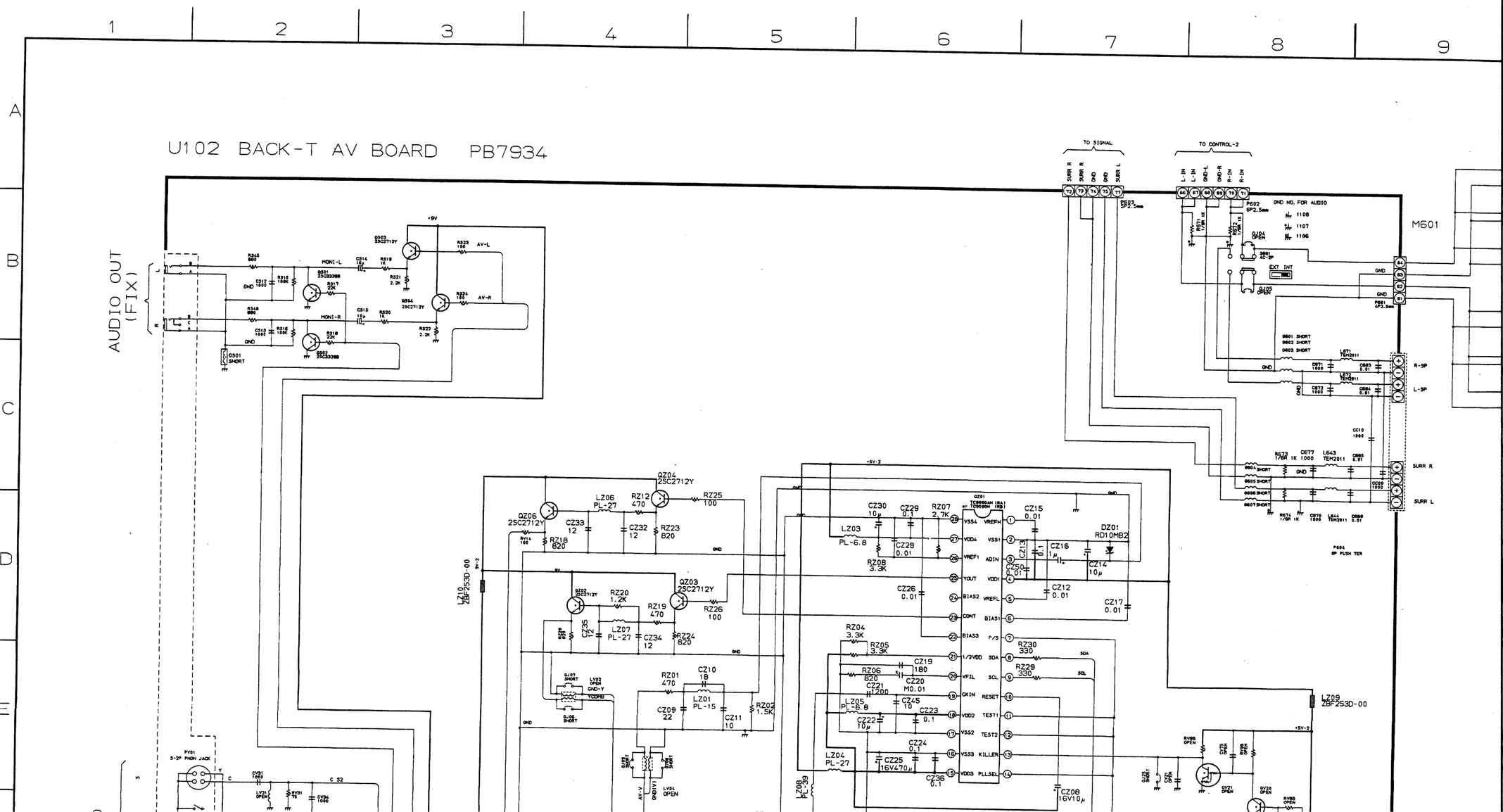
gram. These are measured for separated fr
2. The circuits are subject to change without
3. ⬬ : Solder links.



NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. ⬬ : Solder links.

EXPRESSION

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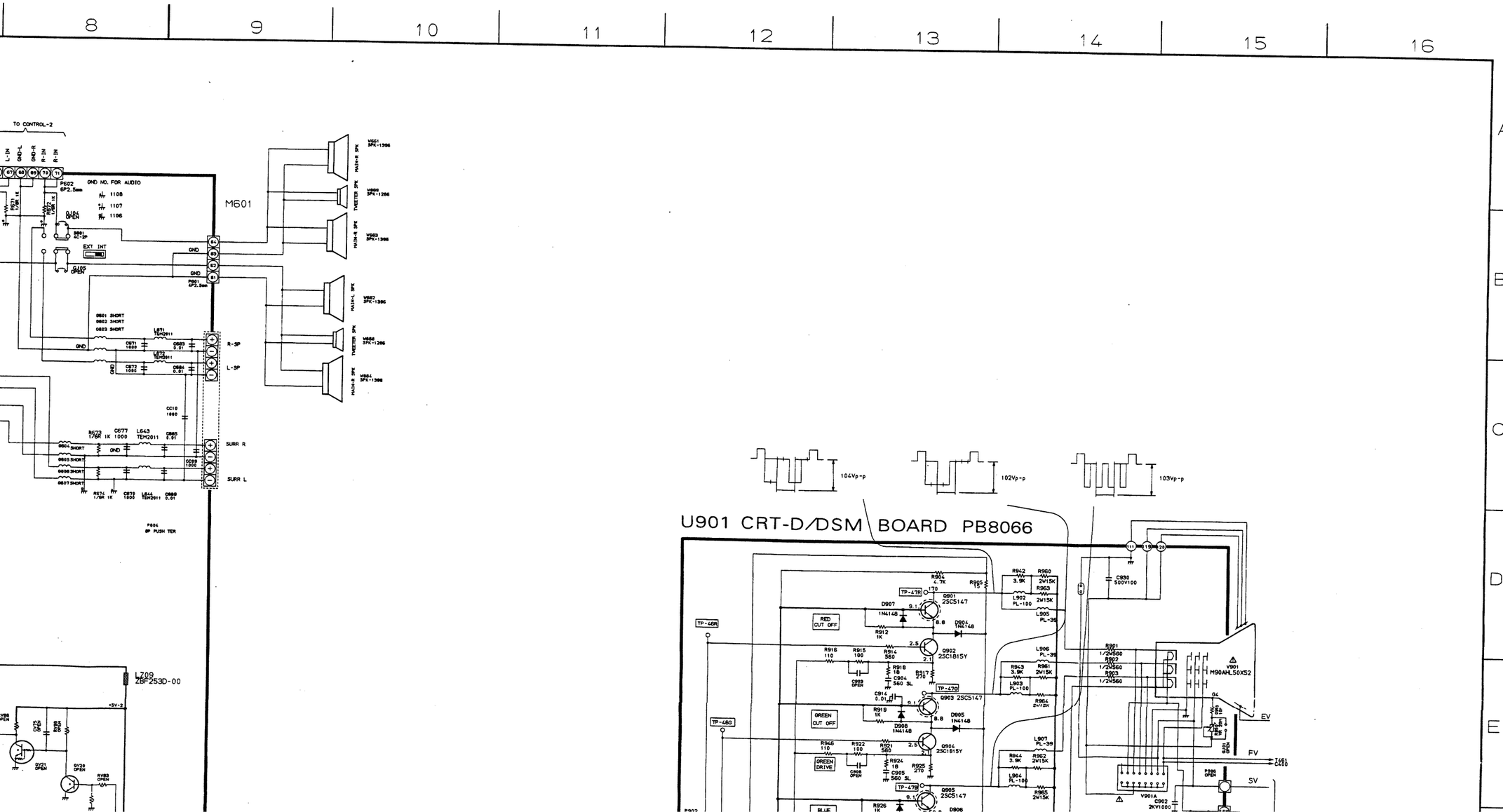
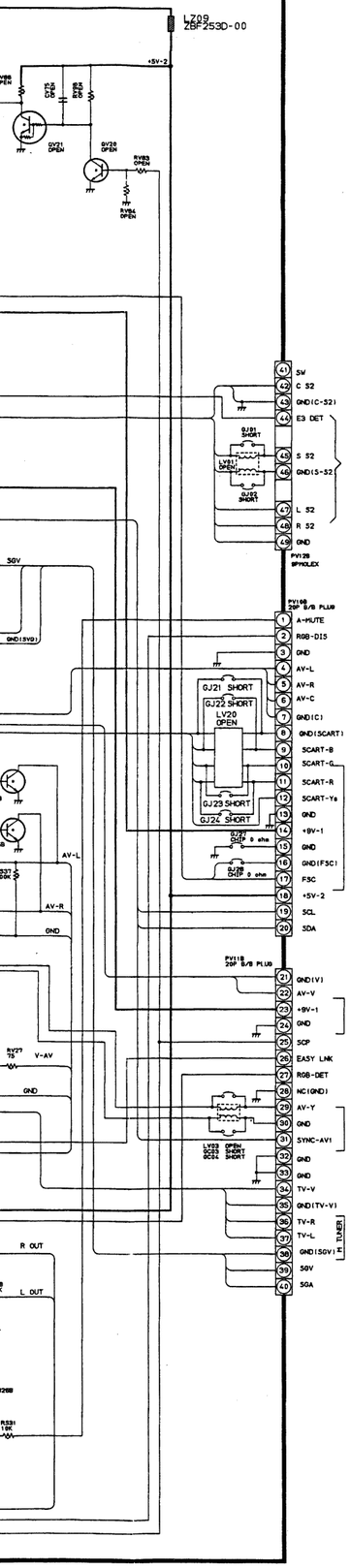
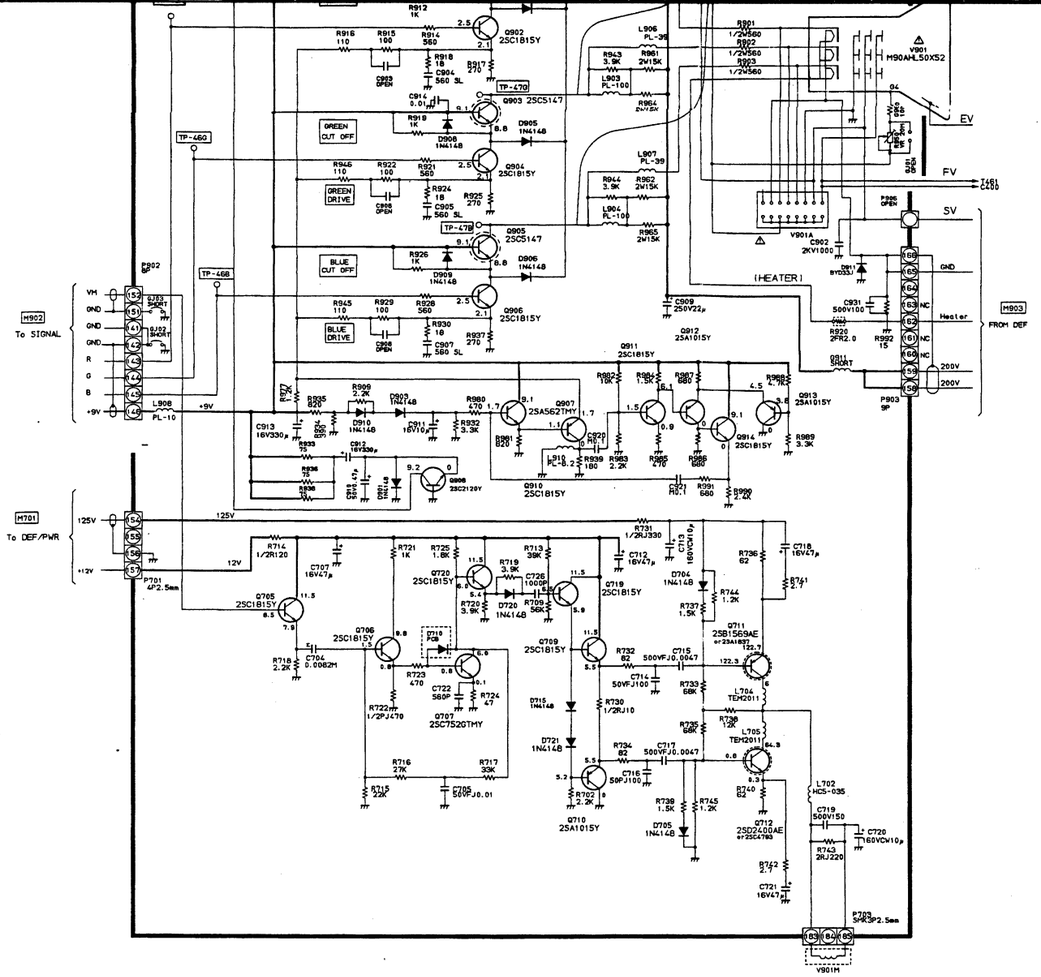
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH, and the values less than 1 in H.

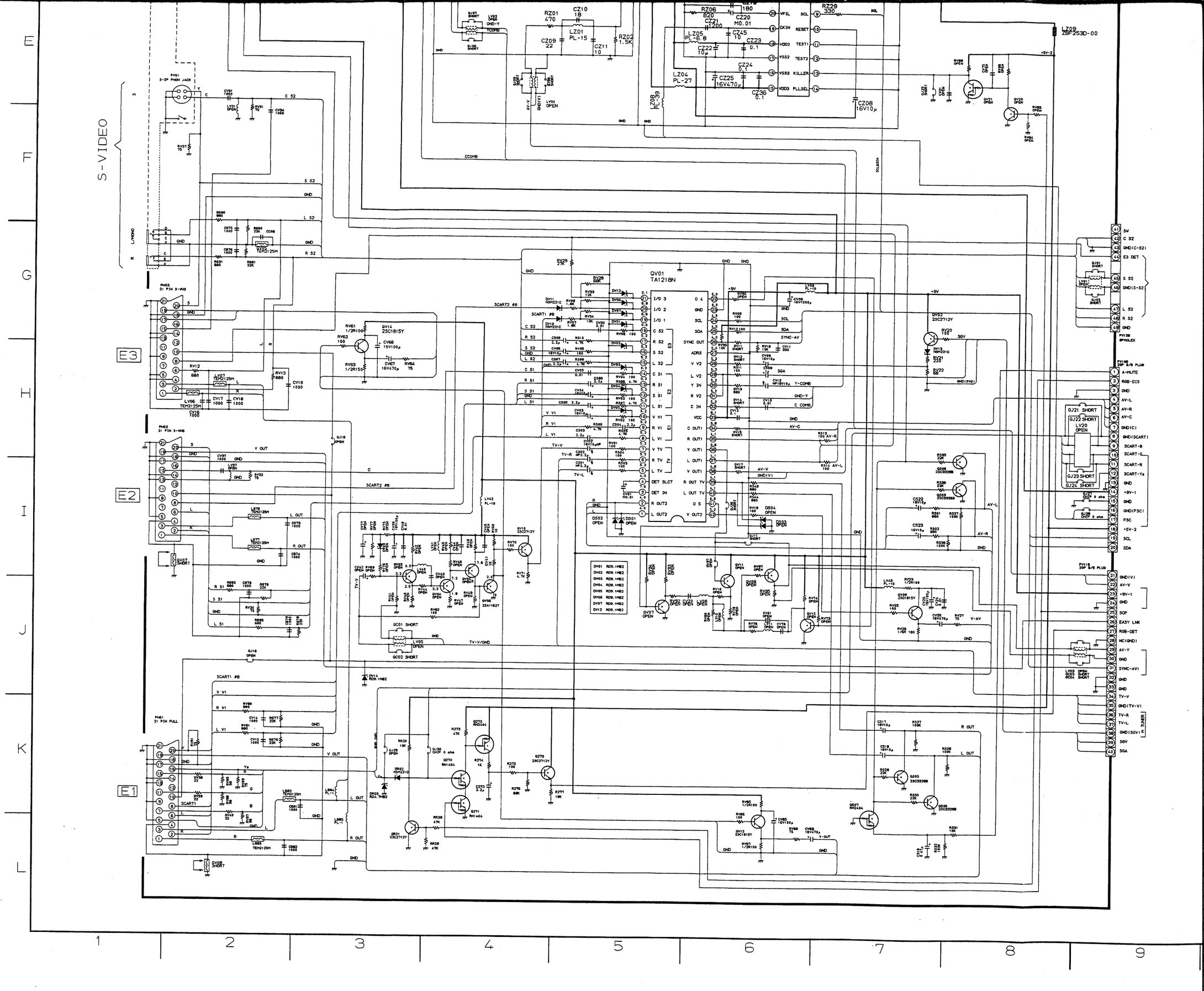






50Hz/100W/AC-3

BACK-T/CRT-D
3787DB 3/5
PK2639


S-VIDEO
E3
E2
E1
SCART2 #8
SCART1 #8
QV01 TA1218N
LZ09 ZBF253D-00
LZ04 PL-27
LZ08 PL-39
LZ01 PL-15
LZ05 PL-6.8
LV06 TEM2125M
LV07 TEM2125M
LV08 PL-10
LV42 PL-10
LV43 PL-10
QV02 2SC2712Y
QV14 2SC1815Y
QV15 2SC2712Y
QV16 2SA1162Y
QV12 2SC1815Y
Q270 RN1404
Q271 RN1404
Q272 RN2404
Q273 2SC2712Y
Q504 2SC3326B
Q505 2SC3326B
Q506 2SC3326B
Q507 RN2404
DR01 HSM221C
DR02 HSM221C
DV01 RD9.1HB2
DV02 RD9.1HB2
DV03 RD9.1HB2
DV04 RD9.1HB2
DV05 RD9.1HB2
DV06 RD9.1HB2
DV07 RD9.1HB2
DV12 RD9.1HB2
DV14 RD9.1HB2
PH01 21 PIN FULL
PH02 21 PIN S-VHS
PH03 21 PIN S-VHS
PV01 3-2P PHON JACK
PV02 SPROLEX
PV118 20P S/B PLUG
PV119 20P S/B PLUG
I/O 3
I/O 2
I/O 1
C S2
R S2
S S2
L S2
C S1
R S1
S S1
L S1
V V1
R V1
L V1
TV-V
TV-R
TV-L
V OUT
L OUT
R OUT
SCART1
SYNC OUT
ADR5
V V2
L V2
Y IN
R V2
C IN
VCC
C OUT1
R OUT1
Y OUT1
L OUT1
V OUT1
R OUT TV
L OUT TV
V OUT2
DET SLCT
DET IN
R OUT2
L OUT2
VFIL
CKIN
VDD2
VSS2
VSS3
VDD3
SCL
RESET
TEST1
TEST2
KILLER
PLLSEL
SDA
SYNC-AV
Y-COMB
GND-Y
C COMB
AV-C
AV-V
AV-L
AV-R
V-AV
V-OUT
TV-V/GND
SCART1 #8
SCART2 #8
+9V
+5V-2
+9V-1
50V
50A
GND
GND(C-S2)
E3 DET
GND(S-S2)
GND(TV)
GND(SCART)
SCART-B
SCART-G
SCART-R
SCART-Y&
GND(FSC)
FSC
SCP
EASY LNK
RGB-DET
NC(GND)
AV-Y
SYNC-AV
GND(TV-V)
TV-R
TV-L
GND(SOV)
A-MUTE
RGB-DIS
GJ21 SHORT
GJ22 SHORT
GJ23 SHORT
GJ24 SHORT
LV26 OPEN
GJ11 SHORT
GJ18 OPEN
GJ19 OPEN
GJ25 SHORT
GJ26 OPEN
GJ30 CHIP 0 ohm
GC01 SHORT
GC02 SHORT
LV05 OPEN
LV03 OPEN
GC03 SHORT
GC04 SHORT
GV02 SHORT
GV08 SHORT
LV01 SHORT
LV02 OPEN
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SCHEMATIC DIAGRAM MODEL : 3787DB (4/5)

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary ±20%.
2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
3. Waveforms are taken using a standard colour bar signal.
4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

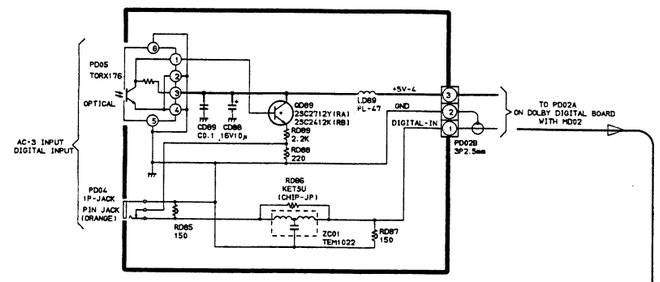
NOTES:

1. D.C. resistance value of a principal transform
   gram. These are measured for separated from t
2. The circuits are subject to change without noti
3. ⬬ : Solder links.

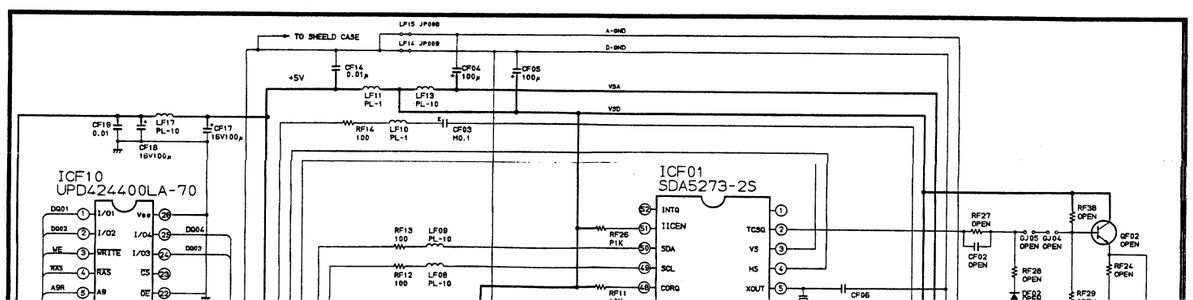
1 2 3 4 5 6 7 8 9

A B C D E

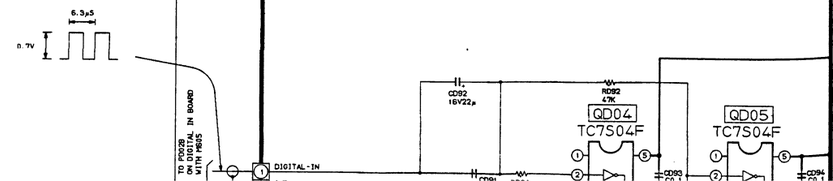
U101B DIGITAL INPUT BOARD
PB7944X-2



U104A TEXT BOARD PB7928Y



U101A DOLBY DIGITAL BOARD PB7944X



NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. ⬬ : Solder links.

EXPRESSION

VALUE OF RESISTOR, CAPACITOR and INDUCTOR

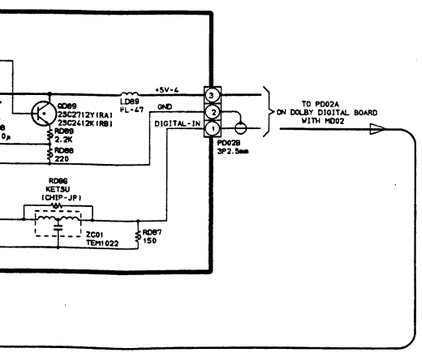
1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH, and the values less than 1 in H.

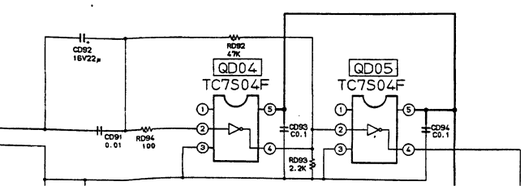
8 9 10 11 12 13 14 15 16

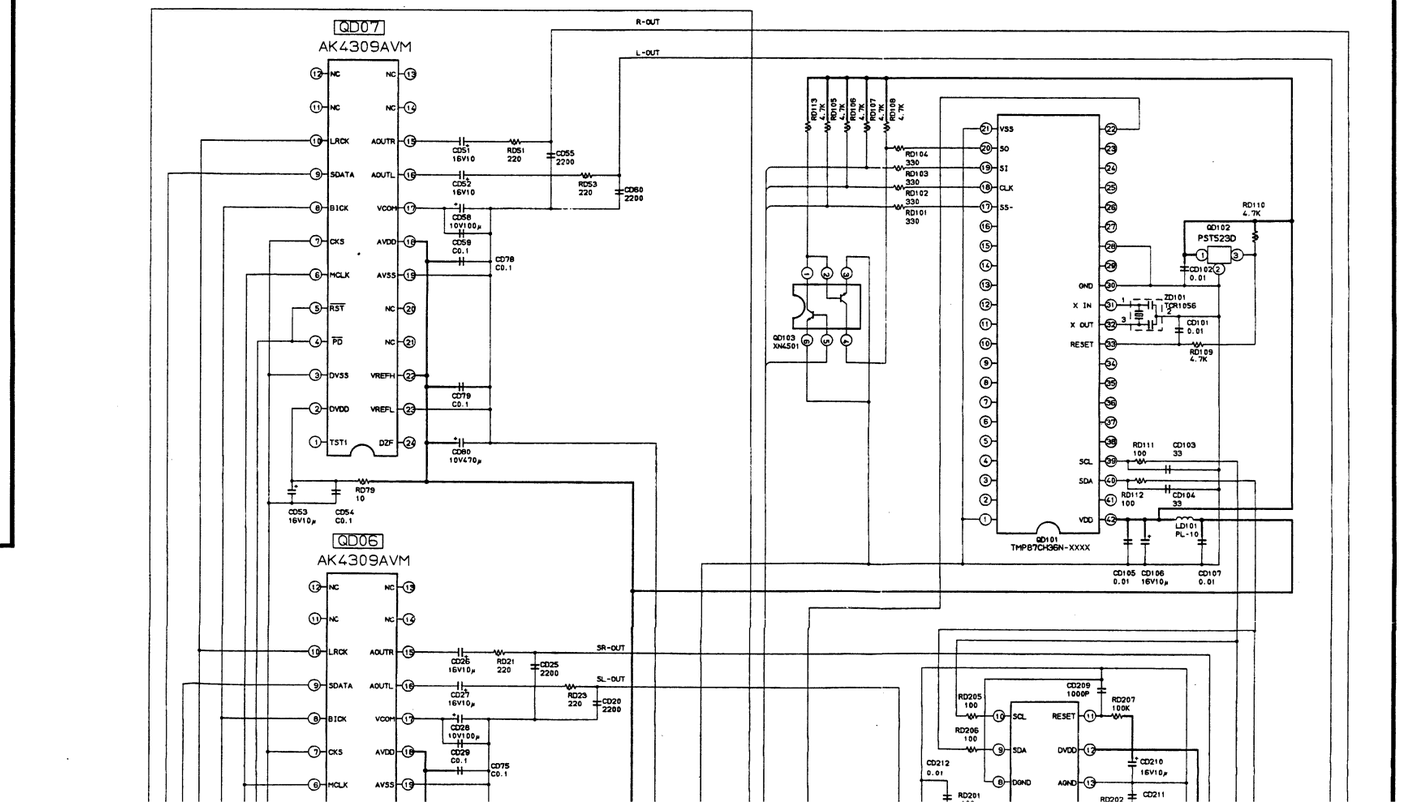
A B C D E

ITAL INPUT BOARD
944X-2

OLBY DIGITAL BOARD PB7944X-1







QD01
ZR38600

QD02
AK4309AVM

QD06
AK4309AVM

QD04
TC7S04F

QD05
TC7S04F

QD201
MG2420SP

QD30
TA1217AN

QD80
2SC3852 (RA)
2SD1944H (RB)
2SD1405BL (RC)

DD81
HTZJ3.9B

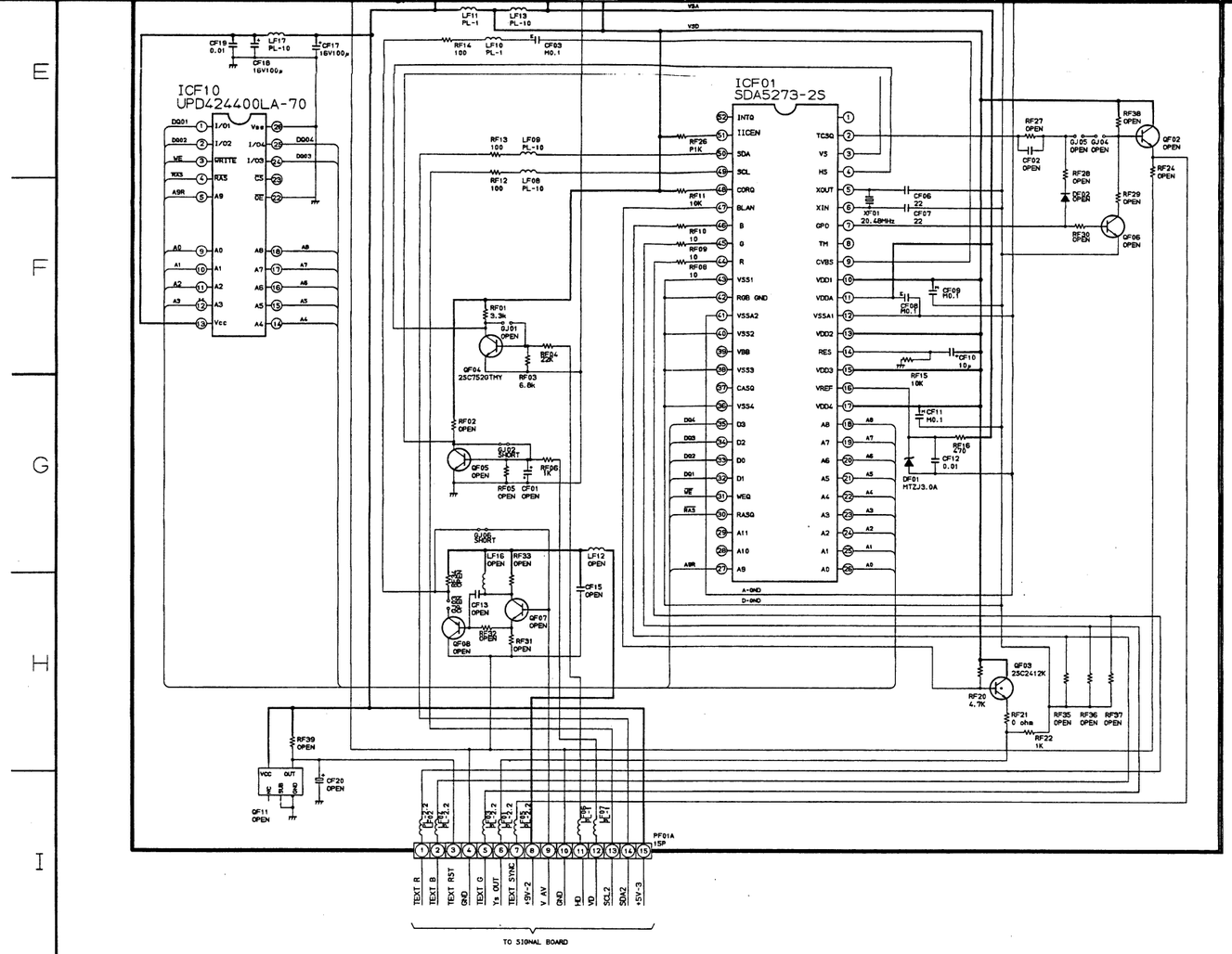
PD30
9P PLUG

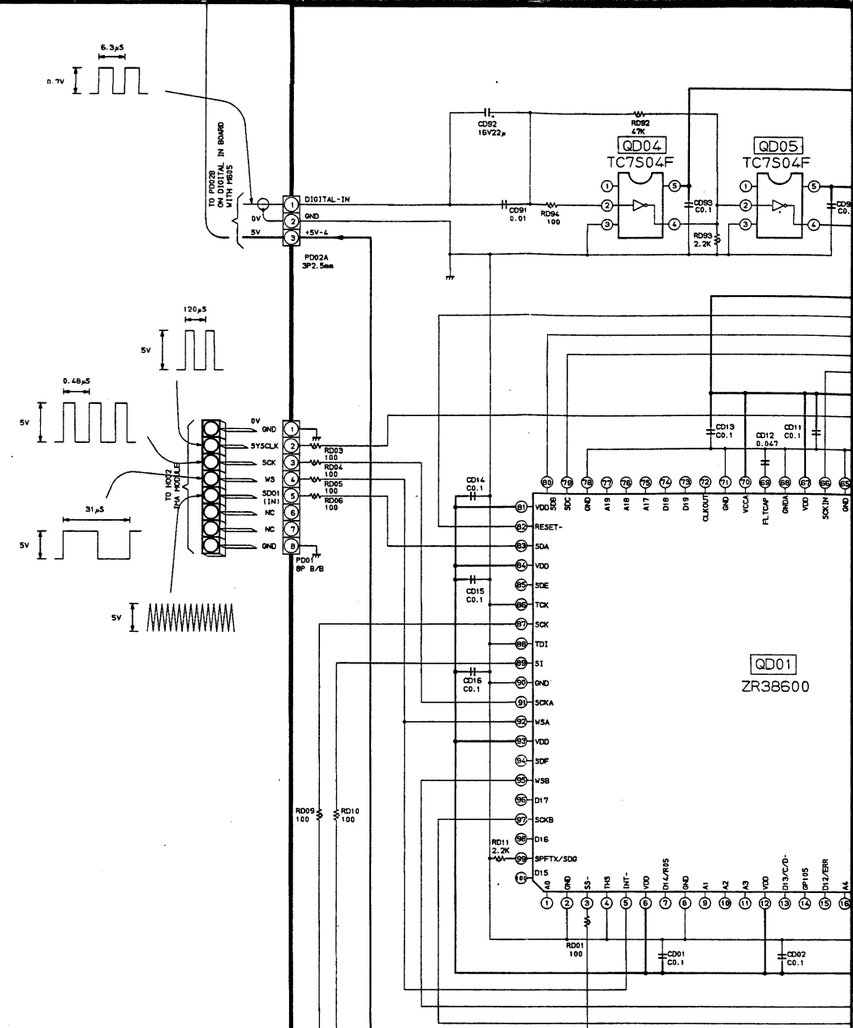
PD31
13P SOCKT

TO SIGNAL BOARD

50Hz/100W/AC-3

TEXT/DOLBY DIGITAL
3787DB 4/5
PK2640


ICF10
UPD424400LA-70
ICF01
SDA5273-2S
QF01
MTZJ3.0A
QF02
QF03
2SC2412K
QF04
2SC7520THY
QF05
QF06
QF07
QF08
PF01A
15P
TEXT R
TEXT B
TEXT RST
GND
TEXT G
Ys OUT
TEXT SYNC
+9V-2
V_AV
GND
HD
VD
SCL2
SDA2
+5V-3
TO SIGNAL BOARD


TO POWER BOARD CN1 DIGITAL IN WITH MOS
DIGITAL-IN
PD02A
3P2.5mm
TO HOST MODULE
PD01
8P B/B
QD01
ZR38600
QD04
TC7S04F
QD05
TC7S04F

SCHEMATIC DIAGRAM MODEL : 3787DB (5/5)

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

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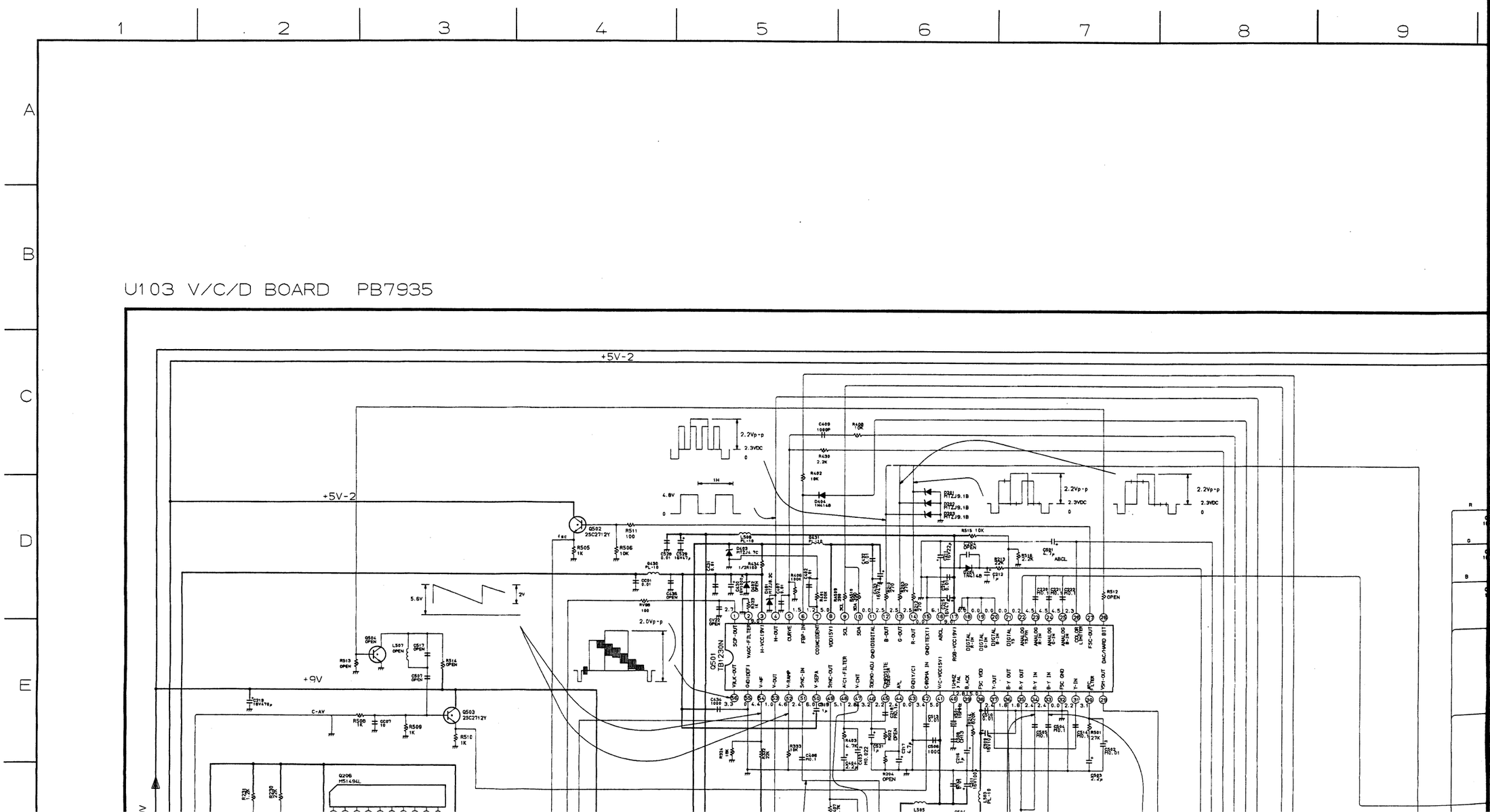
1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary ±20%.
2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
3. Waveforms are taken using a standard colour bar signal.
4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

NOTES:

1. D.C. resistance value of a principal transforme
   gram. These are measured for separated from th
2. The circuits are subject to change without notic
3. ⬬ : Solder links.



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apacity probe.

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ntrols for best

NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. ◓ : Solder links.

EXPRESSION

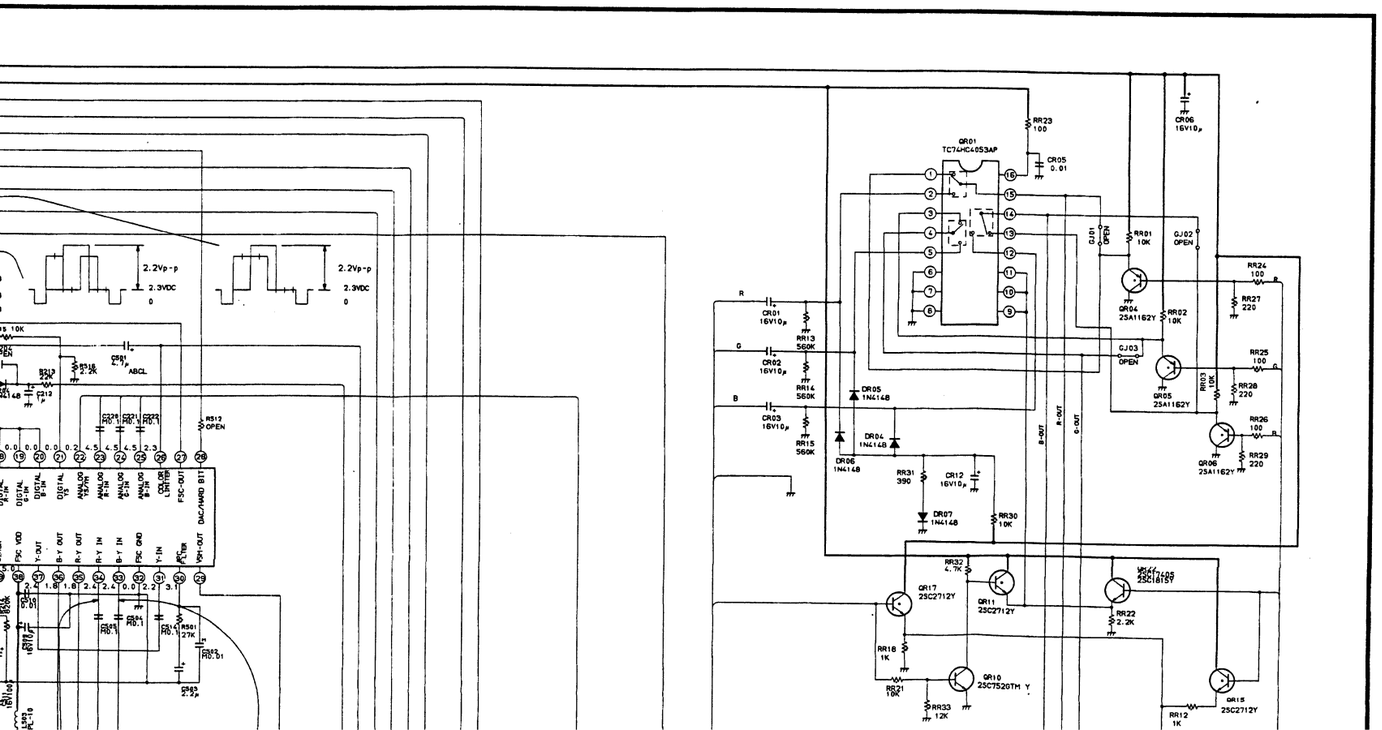
VALUE OF RESISTOR, CAPACITOR and INDUCTOR

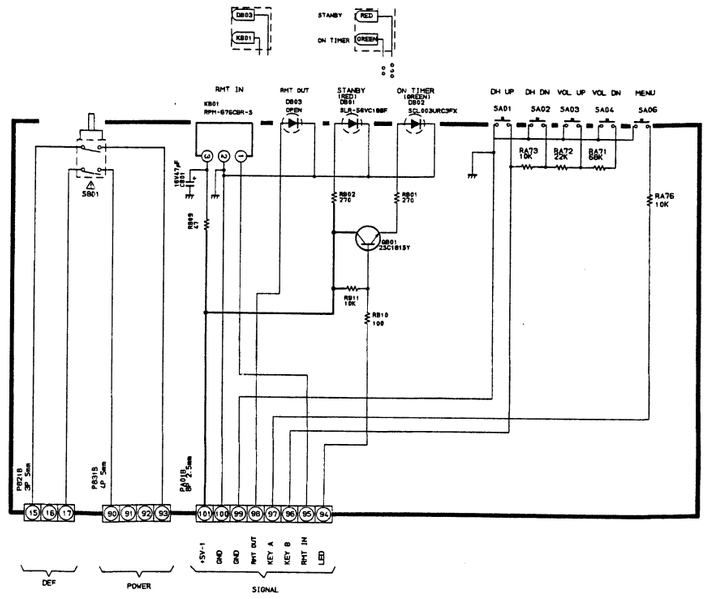
1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH, and the values less than 1 in H.

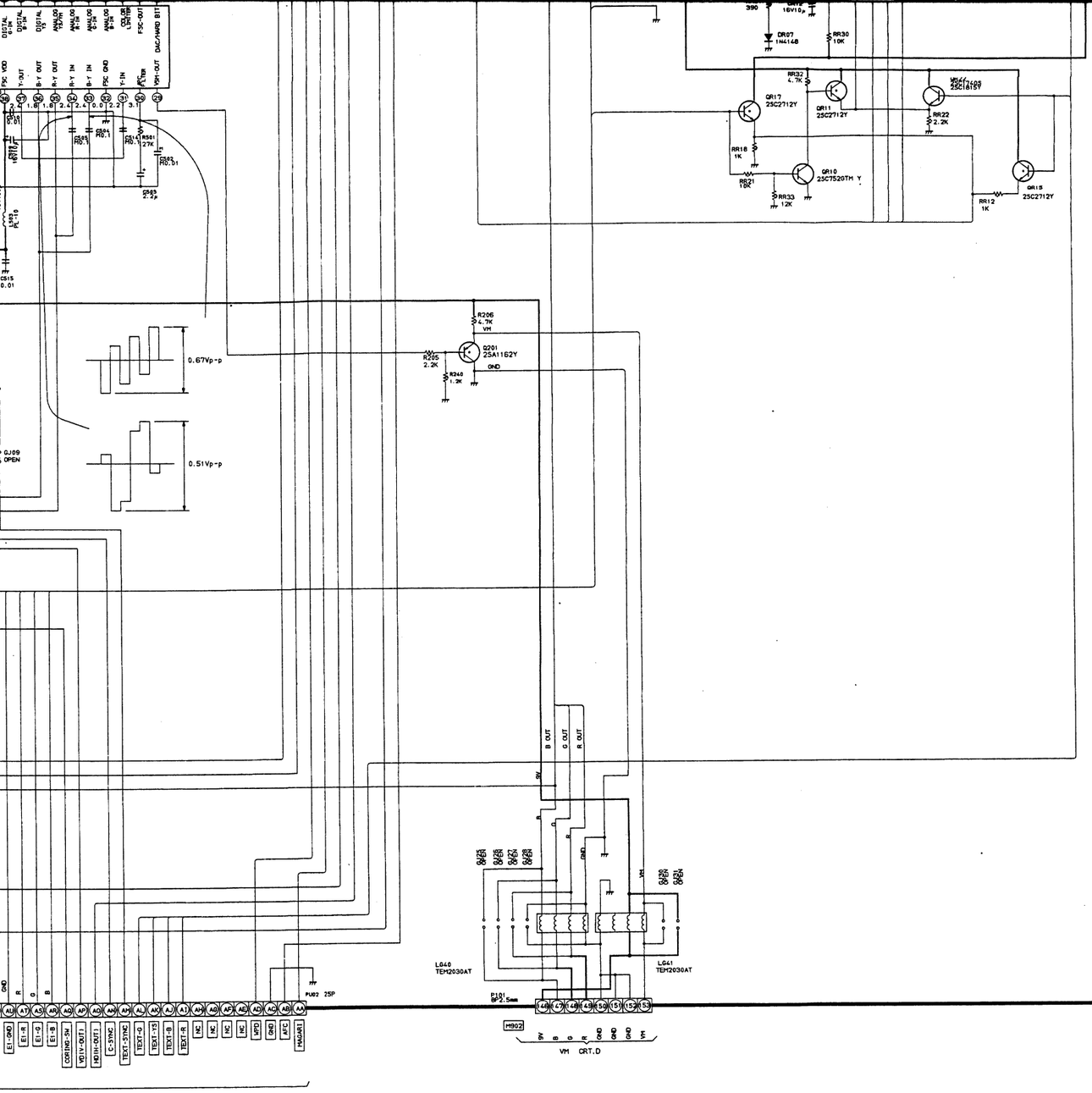
7 8 9 10 11 12 13 14 15 16

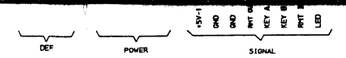
A B C D E

U906A CONTROL-1 BOARD PB7939X-1

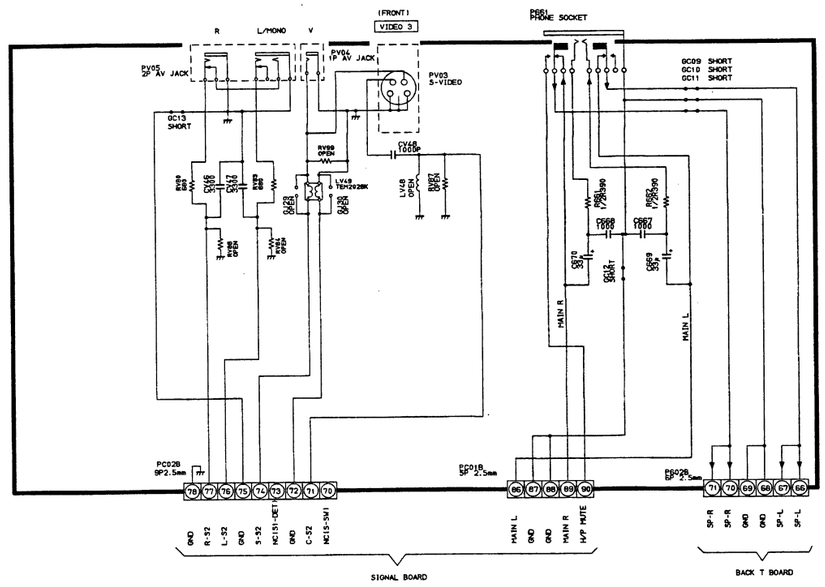






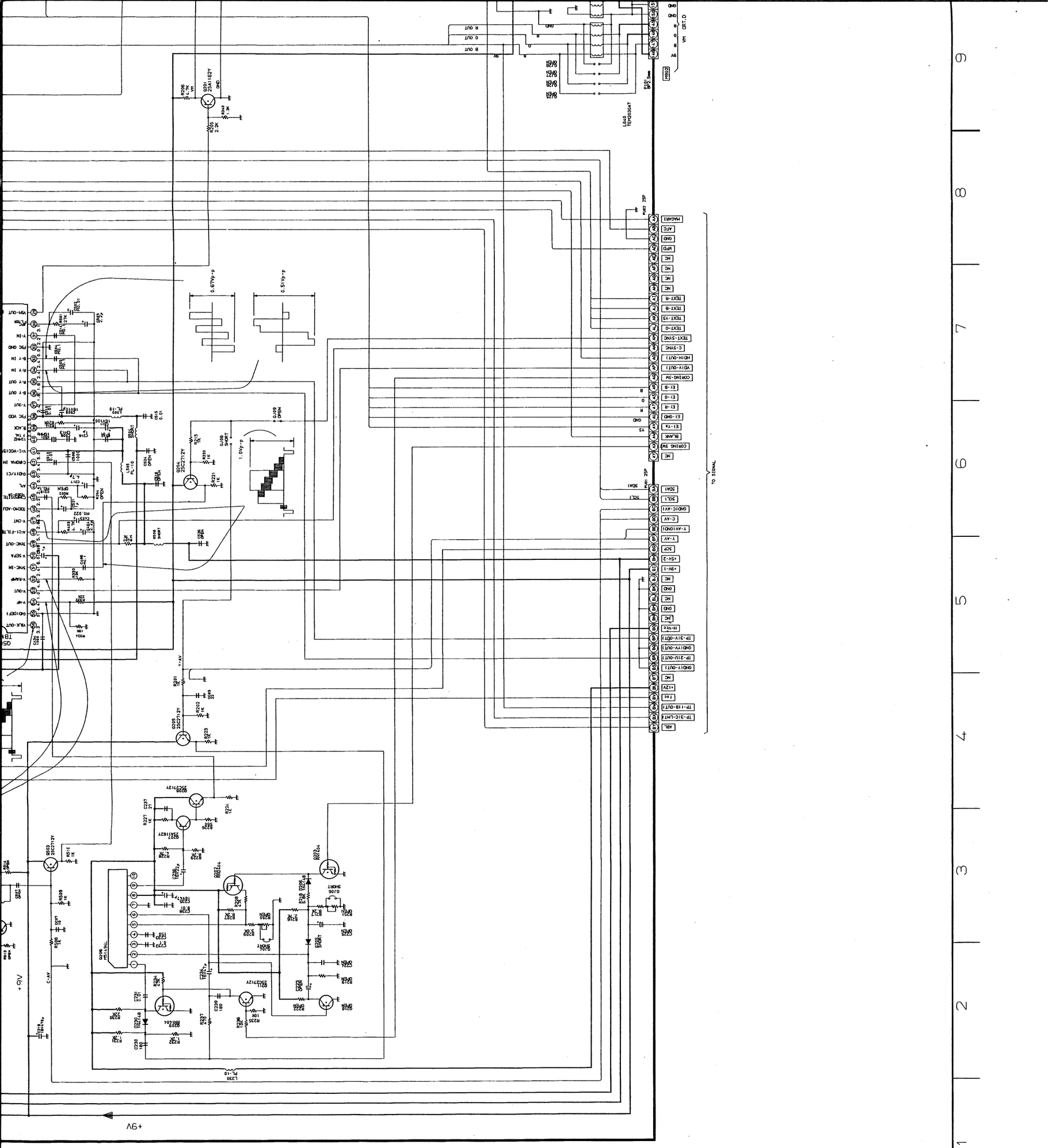


U906B CONTROL-2 BOARD PB7939X-2



50Hz/100W/AC-3

VCD/CONTROL
3787DB 5/5
PK2641


0.67Vp-p
0.51Vp-p
1.0Vp-p
TO SIGNAL
+9V
+5V
GND
C-5VNC
TEXT-SYNC
TEXT-R
TEXT-G
TEXT-B
TEXT-YS
HDIN-OUT1
VDIV-OUT1
CORING-SW
BLANK
SCL1
SDA1
C-AV
Y-AV
SCP
H-VCC
ABL
+12V
GND1Y-OUT1
TP-2IV-OUT1
GND1VV-OUT1
TP-3IV-OUT1
TP-1IB-OUT1
TP-3IC-LMT1
CRT.D
VM
R205 2.2K
R206 4.7K
R221 1K
R222 1K
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